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**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet MITTENS, SHELL/INSERTS COLD WEATHER	
Solicitation No. - N° de l'invitation W8486-151779/A	Date 2015-09-16
Client Reference No. - N° de référence du client W8486-151779	
GETS Reference No. - N° de référence de SEAG PW-\$\$PR-713-68008	
File No. - N° de dossier pr713.W8486-151779	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-11-17	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Macleod, Joyce	Buyer Id - Id de l'acheteur pr713
Telephone No. - N° de téléphone (819) 934-0983 ()	FAX No. - N° de FAX (819) 956-5454
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Clothing and Textiles Division / Division des vêtements et
des textiles
11 Laurier St./ 11, rue Laurier
6A2, Place du Portage
Gatineau, Québec K1A 0S5

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie) Signature Date	

Solicitation No. - N° de l'invitation

W8486-151779/A

Amd. No. - N° de la modif.

File No. - N° du dossier

pr713W8486-151779

Buyer ID - Id de l'acheteur

pr713

Client Ref. No. - N° de réf. du client

W8486-151779

CCC No./N° CCC - FMS No/ N° VME

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NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

Appendix 1 to Annex C
To: W8486-151779
DSSPM 2-3-LI-3-5
May 30, 2014

<p>SPECIFICATION</p> <p>FOR</p> <p>LEATHER, GOATSKIN, ANILINE, CHROME TANNED, GLOVING</p> <p>(For Extreme Cold Weather Mitt Shell 8415-21-104-2104 A/A)</p>	<p>SPÉCIFICATION</p> <p>POUR</p> <p>CUIR DE PEAU DE CHÈVRE ANILINE TANNÉ AU CHROME, POUR GANTS</p> <p>(pour gants d'opérateur de treuil, Force aérienne, 8415-20-008-8027 A/A)</p>
<p>1 SCOPE</p> <p>1.1 This specification defines the technical requirements for chrome tanned, aniline goatskin leather used for gloving end-item applications.</p> <p>2 APPICABLE DOCUMENTS</p> <p>2.1 The following documents or portions thereof are referenced within this specification and shall be considered part of the requirement. Documents referenced within the documents cited herein shall not be applicable unless the extent is specifically delineated in this specification. The edition in effect on the date of the Request For Proposal is the applicable edition unless otherwise specified.</p> <p>Government Documents</p> <p>Not applicable</p> <p>Other publications</p> <p>2.2 The following documents form part of this specification to the extent specified herein. Effective dates shall be those in effect on the date of manufacture. Sources are as shown.</p> <p><i>American Society for Testing and Materials (ASTM) 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610)-832-9585 Fax: (610)-832-9555</i></p>	<p>1 PORTÉE</p> <p>1.1 La présente spécification définit les exigences techniques relatives au cuir de peau de chèvre aniline tanné au chrome utilisé pour fabriquer des gants.</p> <p>2 DOCUMENTS APPICABLES</p> <p>2.1 Les documents suivants ou des parties de ces derniers sont cités dans la présente spécification et doivent être considérés comme faisant partie des exigences. Les références citées dans ces documents ne sont pas applicables, à moins que la présente spécification ne le précise expressément. Sauf indication contraire, l'édition en vigueur à la date de la demande de propositions s'applique.</p> <p>Documents du gouvernement</p> <p>Sans objet.</p> <p>Autres publications</p> <p>2.2 Les documents suivants font partie intégrante de la présente spécification dans la mesure prescrite par cette dernière. La version en vigueur à la date de fabrication s'applique. Ces documents peuvent être obtenus auprès des sources mentionnées ci-après.</p> <p><i>American Society for Testing and Materials (ASTM) 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 ÉTATS-UNIS Téléphone : 610-832-9585</i></p>

To: W8486-151779
DSSPM 2-3-LI-3-5
May 30, 2014

		Télécopieur : 610-832-9555
ASTM D1813	Standard Test Method for Measuring Thickness of Leather Test Specimens	ASTM D1813 Standard Test Method for Measuring Thickness of Leather Test Specimens
ASTM D1814	Standard Test Method for Measuring Thickness of Leather Units	ASTM D1814 Standard Test Method for Measuring Thickness of Leather Units
ASTM D1815	Standard Test Method for Water Absorption (Static) of Vegetable Tanned Leather	ASTM D1815 Standard Test Method for Water Absorption (Static) of Vegetable Tanned Leather
ASTM D2212	Standard Test Method for Slit Tear Resistance of Leather	ASTM D2212 Standard Test Method for Slit Tear Resistance of Leather
ASTM D2807-93	Standard Test Method for Chromic Oxide in Leather (Perchloric Acid Oxidation)	ASTM D2807-93 Standard Test Method for Chromic Oxide in Leather (Perchloric Acid Oxidation)
ASTM D2810-93	Standard Test Method for pH of Leather	ASTM D2810-93 Standard Test Method for pH of Leather
ASTM D4966	Standard Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)	ASTM D4966 Standard Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)
ASTM E 96	Standard Test Methods for Water Vapour Transmission of Materials	ASTM E 96 Standard Test Methods for Water Vapour Transmission of Materials
<i>American Association of Textile Chemists and Colorists P.O. Box 12215 Research Triangle Park, North Carolina, 27709 U.S.A</i>		<i>Association américaine des chimistes et coloristes du secteur textile (AATCC) P.O. Box 12215 Research Triangle Park, North Carolina, 27709 ÉTATS-UNIS</i>
AATCC Test Method 118-92	Oil Repellency: Hydrocarbon Resistance Test	AATCC Test Method 118-92 Oil Repellency: Hydrocarbon Resistance Test
<i>British Standards Organization 389 Chiswick High Road London, United Kingdom W4 4AL Phone: 44 181996 7000 Fax: 44 181996 7001</i>		<i>British Standards Organization 389 Chiswick High Road London, ROYAUME-UNI W4 4AL Téléphone : 44 181996 7000 Télécopieur : 44 181996 7001</i>
BS 3144 -1987	Methods of Sampling and Testing of Leather, Part 28: Method for Measurements and Thickness of Surface Coatings on Leather	BS 3144 -1987 Methods of Sampling and Testing of Leather, Part 28: Method for Measurements and Thickness of Surface Coatings on Leather
<i>Canadian General Standards Board Sales Unit 11 Laurier Street Place du Portage, Phase III Gatineau, Quebec, K1A 1G6</i>		<i>Office des normes générales du Canada, Centre des ventes 11, rue Laurier Place du Portage, Phase III</i>

<p><i>Tel.: 819-956-0425</i> <i>Toll free: 800-665-2472</i> ncr.cgsb-ongc@pwgsc.gc.ca</p>	<p><i>Gatineau (Québec) K1A 1G6</i> <i>Téléphone : 819-956-0425</i> <i>Sans frais : 1-800-665-2472</i> ncr.cgsb-ongc@pwgsc.gc.ca</p>
<p>CAN/CGSB-4.2M Method 22 Colourfastness to Rubbing (Crocking)</p>	<p>CAN/CGSB-4.2M, Méthode 22 Solidité de la couleur au frottement (dégorgement par frottement)</p>
<p>CAN/CGSB-4.2M Method 26.3 Water Resistance</p> <p><i>General Services Administration</i> <i>General Services Administration Business Center</i> <i>Chicago, Illinois. U.S.A</i></p>	<p>CAN/CGSB-4.2M, Méthode 26.3 Résistance à la pénétration de l'eau</p> <p><i>General Services Administration</i> <i>General Services Administration Business Center</i> <i>Chicago, Illinois</i> <i>ÉTATS-UNIS</i></p>
<p>FED-STD-311 Leather Methods of Sampling and Testing</p> <p>The Standardisation and Analysis of Hand Evaluation, Chapter IV. Measurement of the Mechanical Properties of Fabrics - (para 2.2) Bending Properties</p> <p><i>Standards Council of Canada</i> <i>350 Sparks Street, Suite 1200</i> <i>Ottawa, Ontario, K1P 6N7</i> <i>Telephone: 613-238-3222</i> <i>Fax: 613-569-7808</i></p>	<p>FED-STD-311 Leather Methods of Sampling and Testing</p> <p>The Standardisation and Analysis of Hand Evaluation, Chapter IV. Measurement of the Mechanical Properties of Fabrics - (parag. 2.2) Bending Properties</p> <p><i>Conseil canadien des normes</i> <i>350, rue Sparks, bureau 1200</i> <i>Ottawa (Ontario) K1P 6N7</i> <i>Téléphone : 613-238-3222</i> <i>Télécopieur : 613-569-7808</i></p>
<p>ISO 811 International Standard for Textiles - Determination of Resistance to Water Penetration - Hydrostatic Pressure Test</p>	<p>ISO 811 Norme internationale, Étoffes – Détermination de la résistance à la pénétration de l'eau – Essai sous pression hydrostatique</p>
<p>3 REQUIREMENTS</p> <p>3.1 Materials. The leather shall be chrome tanned from green or salted goat hides. The finished leather shall be thoroughly tanned and mellow and of good fibre. Pipey (flanky) leather will not be accepted. Materials used in tanning and finishing shall have no injurious effects on the leather or the ultimate user of the leather.</p> <p>3.2 Finish. The leather shall be full grain (not buffed or snuffed) and free from imperfections or blemishes that may affect its appearance or serviceability. The leather shall be soft, smooth, and pliable. Unless otherwise specified, the finish shall not have an excessive amount of pigment. The flesh side shall be smooth and free from loose flesh.</p>	<p>3 EXIGENCES</p> <p>3.1 Matériaux. Le cuir doit être tanné au chrome à partir de peaux de chèvre vertes ou saumurées. Le cuir fini doit être entièrement tanné et adouci et composé de fibres de qualité. Le cuir flancheux ne sera pas accepté. Les matériaux utilisés pour le tannage et le finissage ne doivent pas nuire au cuir ni à l'utilisateur du cuir.</p> <p>3.2 Finissage. Le cuir doit être pleine fleur (non poncé ni effleuré) et exempt d'imperfections ou de défauts qui pourraient nuire à son aspect ou à son aptitude au service. Le cuir doit être souple, lisse et pliable. Sauf indication contraire, le fini ne doit pas avoir trop de pigmentation. Le côté chair doit être lisse et exempt de morceaux de chair.</p>

<p>3.3 Trim. The edges of the belly and the forepart shall be trimmed in accordance with standard tannery practice and shall be free from ragged edges.</p> <p>3.4 Colour. Colour shall be as specified in the contract.</p> <p>3.5 Thickness The thickness shall be as specified in the contract.</p> <p>3.6 Testing. Required properties and performance levels are described in the Table I.</p> <p>3.7 Independent accredited laboratories very experienced in the testing of leather shall carry out these tests. Test results shall be provided to the Department of National Defence on the basis specified in the contract.</p> <p>4 QUALITY CONTROL/INSPECTION</p> <p>4.1 Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services conform to prescribed requirements. The contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.</p> <p>4.2 PACKAGING</p> <p>4.2.1 Packaging and Packing. Unless otherwise specified, packaging and packing as well as delivery shall be in accordance with the terms of the contract.</p> <p>5 NOTES</p> <p>5.1 Procurement documents should specify the title, number and date of this specification. Specification Copies. Copies of this specification may be obtained from the Department of National Defence, Ottawa, Ontario K1A 0K2.</p> <p>5.2 DND green procurement. The production of</p>	<p>3.3 Rognage. Les bords des flancs et du devant doivent être rognés conformément aux pratiques de tannage courantes et doivent être exempts de déchirures.</p> <p>3.4 Couleur. La couleur doit être celle spécifiée au contrat.</p> <p>3.5 Épaisseur. L'épaisseur doit être celle spécifiée au contrat.</p> <p>3.6 Essais. Les propriétés exigées et les niveaux de rendement sont décrits dans le tableau I.</p> <p>3.7 Les essais doivent être effectués par des laboratoires accrédités indépendants ayant une vaste expérience dans l'essai du cuir. Les résultats des essais doivent être fournis au ministère de la Défense nationale à la fréquence spécifiée au contrat.</p> <p>4 CONTRÔLE DE LA QUALITÉ ET INSPECTION</p> <p>4.1 Sauf indication contraire dans le contrat ou les documents d'achat, l'entrepreneur est tenu d'effectuer toutes les inspections mentionnées dans la présente spécification. L'entrepreneur peut utiliser ses propres installations d'inspection ou toute autre installation jugée acceptable par le gouvernement ou son représentant désigné. Le gouvernement se réserve le droit d'effectuer toute inspection précisée aux présentes pour s'assurer que les matériaux et les services sont conformes aux exigences qui y sont énoncées. L'entrepreneur doit s'assurer que les matériaux et les services proposés au gouvernement sont conformes à toutes les exigences du contrat.</p> <p>4.2 CONDITIONNEMENT</p> <p>4.3 Conditionnement et emballage. Sauf indication contraire, le conditionnement et l'emballage, de même que la livraison, doivent être conformes aux termes du contrat.</p> <p>5 NOTES</p> <p>5.1 Les documents d'achat doivent préciser le titre, le numéro et la date de la présente spécification. Exemplaires de la spécification. Des exemplaires de la présente spécification peuvent être obtenus auprès du ministère de la Défense nationale, Ottawa (Ontario) K1A 0K2.</p> <p>5.2 Approvisionnement écologique du MDN. La</p>
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<p>a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any, associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.</p>	<p>fabrication d'un produit ou son évaluation conformément à la présente spécification peut nécessiter l'utilisation de matériel ou d'équipement dangereux. La présente spécification n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement qui pourraient être associées à son utilisation. Il incombe à l'utilisateur de la présente spécification d'établir au préalable des méthodes appropriées qui tiennent compte des questions relatives à la santé, à la sécurité et à l'environnement, et de déterminer les restrictions réglementaires applicables.</p>
<p>6 Definition of terms</p>	<p>6 Définitions des termes</p>
<p>6.1 Design Authority. The Design Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Design Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM). Master Sealed Pattern. A master sealed pattern is the authorized prototype of the item to be produced, and is held only by the Government.</p>	<p>6.1 Autorité responsable de la conception. Organisme gouvernemental responsable des aspects techniques de la conception et des modifications connexes. Dans le cas du présent besoin, il s'agit de la Direction de l'administration du programme de l'équipement du soldat (DAPES).</p>
<p>6.2 Quality Assurance Authority (QAA). The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement</p>	<p>6.2 Modèle réglementaire principal. Seul prototype autorisé de l'article qui doit être fabriqué et dont le gouvernement est le seul détenteur. Autorité responsable de l'assurance de la qualité (AAQ). Organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur satisfont aux exigences prescrites. L'AAQ sera précisée dans le document d'achat.</p>
<p>6.3 Quality Assurance Authority. The Quality Assurance Authority is the Government agency responsible for ensuring that materiel and services supplied by the contractor perform to the specified requirements. The Quality Assurance Authority will be specified in the contract.</p>	<p>6.3 Autorité responsable de l'assurance de la qualité. Organisme gouvernemental chargé d'assurer que les matériaux et les services fournis par l'entrepreneur satisfont aux exigences prescrites. L'autorité responsable de l'assurance de la qualité sera précisée dans le contrat.</p>
<p>6.4 Sealed Pattern. A sealed pattern is an exact duplicate of the master sealed pattern and is available to the manufacturer to be used as a guide in production.</p>	<p>6.4 Modèle réglementaire. Copie exacte du modèle réglementaire principal qui est mis à la disposition du fabricant qui doit l'utiliser comme un guide pour produire l'article.</p>
<p>6.5 Technical Authority. The Technical Authority is the Government agency responsible for the technical aspects of this specification. The Technical Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM), Department of National Defence, 101 Colonel By Drive, Ottawa, Ontario, K1A 0K2.</p>	<p>6.5 Autorité technique. Organisme gouvernemental responsable des aspects techniques de la présente spécification. Dans le cas du présent besoin, il s'agit de la Direction de l'administration du programme de l'équipement du soldat (DAPES), ministère de la Défense nationale, 101, promenade Colonel By, Ottawa (Ontario) K1A 0K2.</p>

Table I: Chemical and Physical Properties of Goatskin Leather

TEST NO.	PROPERTY	TEST METHOD	REQUIREMENT
1.	Chromium Oxide in Leather (per cent)	ASTM D 2807 - 93	Minimum: 2%
2.	pH of Leather	ASTM D 2810 - 93	Minimum: 3.5
3.	Thickness (ounces or millimetres)	ASTM D 1813 or ASTM D 1814 - 70 (Woburn Gauge)	As specified in contract
4.	Colourfastness to Rubbing (Crocking)	CAN/CGSB-4.2-M Method 22	Required: Dry & Wet: Gray Scale 4 Maximum: Dry & Wet: Gray Scale 3
5.	Water Resistance (kilo Pascals)	CAN/CGSB-4.2-M Method 26.3 or ISO 811 60 cm water/min 10cm ² test area See note for modification to the test method ¹	Minimum: 20 kPa
6.	Water Vapour Diffusion (grams per m ² /hour)	ASTM E 96 (Desiccant Method)	No specimen can be less than 50 g/m ² /h
7.	Tear Strength (Newtons) - Initial - After Abrasion	British Standard (BS) 3144 or ASTM D 2212 5 specimens / direction ASTM D 4966 1600 cycles 5 specimens per direction	40 N Minimum (average of all 10 specimens) Note: No more than one specimen per direction may be less than 40 N. 40 N Minimum (average of all 10 specimens) Note: No more than one specimen per direction may be less than 40 N.
8.	Shrinkage Temperature (degrees Celcius)	FED STD 311, Method 7011.1	Minimum: 90o C

Tableau I – Propriétés chimiques et physiques du cuir de peau de chèvre

ESSAI NO	PROPRIÉTÉ	MÉTHODE D'ESSAI	EXIGENCE
1.	Oxyde de chrome dans le cuir (pourcentage)	ASTM D 2807 - 93	Minimum : 2 %
2.	pH du cuir	ASTM D 2810 - 93	Minimum : 3,5
3.	Épaisseur (onces ou millimètres)	ASTM D 1813 ou ASTM D 1814 - 70 (calibre Woburn)	comme spécifié dans le contrat
4.	Solidité de la couleur au frottement (dégorgement par frottement)	CAN/CGSB-4.2-M, méthode 22	Requis : Sec et mouillé : indice 4 de l'échelle de gris Maximum : Sec et mouillé : indice 3 de l'échelle de gris
5.	Résistance à la pénétration de l'eau (kilopascals)	CAN/CGSB-4.2-M, méthode 26.3 ou ISO 811 60 cm eau/min Zone d'essai de 10 cm ² Voir la remarque concernant la modification de la méthode d'essai ¹	Minimum : 30 kPa
6.	Diffusion de la vapeur (grammes par m ² /h)	ASTM E 96 (méthode du siccatif)	Aucun échantillon ne peut être inférieur à 50 g/m ² /h
7.	Résistance à la déchirure (Newtons) - État initial - Après abrasion	British Standard (BS) 3144 ou ASTM D 2212 5 échantillons/orientation ASTM D 4966 1600 cycles 5 échantillons/orientation	Minimum : 44 N (moyenne des 10 échantillons) Remarque : Pour au plus un échantillon par orientation, le résultat peut être inférieur à 44 N. Minimum : 44 N (moyenne des 10 échantillons) Remarque : Pour au plus un échantillon par orientation, le résultat peut être inférieur à 44 N.
8.	Température de rétraction (degrés Celcius)	FED STD 311, méthode 7011.1	Minimum : 90 o C

¹Pour l'essai de résistance à la pénétration de l'eau selon la norme CGSB 26.3/ISO 811, un grillage métallique rigide (8 trous/po) doit être placé sur le cuir (sur le côté du cuir qui n'est pas en contact avec l'eau) pour empêcher la distension du cuir lorsqu'une pression est exercée.



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Appendix 2 to Annex C
To: W8486-151777
DSSPM 2-3-80-137
May 30, 2014

<p>SPECIFICATION</p> <p>FOR</p> <p>LEATHER, COWHIDE, SPLIT, CHROME TANNED</p> <p>(For Extreme Cold Weather Mitt Shell 8415-21-104-2104 A/A)</p>	<p>DONNÉES DE FABRICATION</p> <p>POUR LE</p> <p>CUIR DE PEAU DE BOVIN, FENTE, TANNÉ AU CHROME</p> <p>(pour les coquilles pour les mitaines pour très grands froids 8415-21-1042104 A/A)</p>
<p>1 SCOPE</p> <p>1.1 This specification covers the physical and chemical requirements for chrome tanned cowhide split leather that is used mainly for hand wear end items.</p> <p>2 APPICABLE DOCUMENTS</p> <p>2.1 The following documents or portions thereof are referenced within this specification and shall be considered part of the requirement. Documents referenced within the documents cited herein shall not be applicable unless the extent is specifically delineated in this specification. The edition in effect on the date of the Request for Proposal is the applicable edition unless otherwise specified.</p> <p>2.2 Government Documents</p> <p>Not applicable</p> <p>2.3 Other publications. The following documents form part of this specification to the extent specified herein. Effective dates shall be those in effect on the date of manufacture. Sources are as shown.</p> <p><i>American Society for Testing and Materials (ASTM)</i> 100 Barr Harbor Drive West Conshohocken. PA 19428-2959 Phone: (610)-832-9585 Fax: (610)-832-9555</p> <p>ASTM D2807 Standard Test Method for Chromic Oxide in Leather</p>	<p>1 PORTEE</p> <p>1.1 Les présentes données de fabrication décrivent les exigences relatives pour le cuir de peau de bovin utilisé pour les applications de gantage de bout en point.</p> <p>2 DOCUMENTS CONNEXES</p> <p>2.1 Les documents suivants, en totalité ou en partie, sont utilisés comme référence dans la présente spécification. Les références citées dans ces documents ne sont pas applicables, à moins que la présente spécification ne le précise expressément. Sauf indication contraire, l'édition en vigueur à la date de la demande de propositions s'applique.</p> <p>2.2 Documents du gouvernement</p> <p>Non applicable.</p> <p>2.3 Autres Publications. Les documents suivants ne sont pas fournis par le gouvernement et peuvent être achetés à partir de la source affichée :</p> <p><i>American Society for Testing and Materials (ASTM)</i> 100 Barr Harbor Drive West Conshohocken. PA 19428-2959 Phone: (610)-832-9585 Fax: (610)-832-9555</p> <p>ASTM D2807 Standard Test Method for Chromic Oxide in Leather (Perchloric Acid</p>

(Perchloric Acid Oxidation)		Oxidation)	
ASTM D2209	Standard Test Method for Tensile Strength of Leather	ASTM D2209	Standard Test Method for Tensile Strength of Leather
ASTM D2617	Standard Test Method for Total Ash in Leather	ASTM D2617	Standard Test Method for Total Ash in Leather
ASTM D2810	Standard Test Method for pH in Leather	ASTM D2810	Standard Test Method for pH in Leather
ASTM D3495	Standard Test Method for Hexane Extraction of Leather	ASTM D3495	Standard Test Method for Hexane Extraction of Leather
ASTM D4704	Standard Test Method for Tearing Strength, Tongue Tear of Leather	ASTM D4704	Standard Test Method for Tearing Strength, Tongue Tear of Leather
ASTM D6076	Standard Test Method for Shrinkage Temperature of Leather	ASTM D6076	Standard Test Method for Shrinkage Temperature of Leather
2.4 Order of precedence.		2.4 Ordre de préséance.	
2.4.1 In the event of conflict between the documents referenced herein and the contents of this specification, the contents of this specification shall be considered a superseding requirement.		2.4.1 En cas de divergence entre le texte des présentes données de fabrication et les références mentionnées aux présentes, le texte des présentes données de fabrication a préséance.	
2.4.2 In the event of inconsistency within the specification, the Contracting Authority shall be contacted for clarification.		2.4.2 En cas d'incohérence dans les présentes données de fabrication, on doit communiquer avec l'autorité contractante pour obtenir des clarifications.	
2.4.3 Nothing in this document supersedes applicable laws and regulations, unless a specific exemption has been obtained.		2.4.3 Rien dans le présent document ne remplace les lois et les règlements qui s'appliquent, à moins d'avoir obtenu une exemption spécifique.	
2.5 REQUIREMENTS		2.5 REQUIREMENTS	
2.5.1 Materials. The split leather shall be taken from full chrome tanned green or salted bovine hides. Dry hides shall not be used. The leather shall be fatliquored but not stuffed. The finished leather shall be thoroughly tanned and mellow and tight fibred. Loose or spongy leather will not be accepted. Materials used in tanning and finishing shall have no injurious effects on the leather or on the ultimate user of the leather.		2.5.1 Matériaux. Le cuir fendu doit être pris de peaux de bovins vertes ou saumurées tanné au chrome. Peaux sèches ne doivent pas être utilisés. Le cuir doit être « fatliquored » non pas « stuffed ». Cuir lâche ou spongieux ne sera pas accepté. Les matériaux utilisés pour le tannage et le finissage ne doivent pas nuire au cuir ni à l'utilisateur du cuir.	
2.5.2 Finish. The flesh side shall be free from loose flesh. After fleshing and splitting, the leather shall be buffed to a smooth and even finish. The leather shall be soft and pliable.		2.5.2 Finissage. Le côté chair doit être lisse et exempt de morceaux de chair. Après l'étoffement et le fractionnement, le cuir doit être poli pour une finition lisse et uniforme. Le cuir doit être souple et pliable.	
2.5.3 Trim. The sides shall have the heads and bellies trimmed off. The edges of the butt and forepart shall be trimmed in accordance with standard leather		2.5.3 Rognage. La tête et les ventres doivent être rognés. Les bords de la crosse et du devant doivent être rognés conformément aux pratiques de tannage	

<p>tannery practices and shall be free from ragged edges. Colour. Colour shall be as specified in the contract.</p> <p>2.5.4 Thickness. The thickness shall be as per specified in the contract or the end item specification. Please note that the Canadian Forces use this leather mainly in handwear end items.</p> <p>2.6 Chemical Properties. When tested in accordance with the methods referenced, the leather shall meet the chemical requirements specified in Table I.</p> <p>2.7 Physical Properties. When tested in accordance with the methods referenced, the leather shall meet the physical requirements specified in Table II.</p> <p>3 QUALITY CONTROL/INSPECTION</p> <p>3.1 Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services conform to prescribed requirements. The contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.</p> <p>3.2 Testing. Required properties and performance levels are described in the Tables I and II. Independent accredited laboratories very experienced in the testing of leather shall carry out these tests. Test results shall be provided to the Quality Assurance Representative of the Department of National Defence on the basis specified in the contract.</p> <p>4 PACKAGING</p> <p>4.1 Packaging and Packing. Unless otherwise specified, packaging and packing as well as delivery shall be in accordance with the terms of the contract.</p> <p>5 NOTES</p>	<p>courantes et doivent être exempts de déchirures. Couleur. La couleur doit être conforme à celle précisée au contrat.</p> <p>2.5.4 Epaisseur. L'épaisseur du cuir doit être conforme à celle précisée au contrat.</p> <p>2.6 Propriétés chimiques. Lors d'un essai conformément aux méthodes mentionnées, le cuir doit satisfaire aux exigences chimiques spécifiées au tableau I.</p> <p>2.7 Propriétés physiques. Lors d'un essai conformément aux méthodes mentionnées, le cuir doit satisfaire aux exigences physique spécifiées au tableau II.</p> <p>3 CONTRÔLE DE LA QUALITÉ ET INSPECTION</p> <p>3.1 L'incombe sera à l'entrepreneur d'effectuer toutes les inspections conformes aux exigences énoncées dans le présent document. L'entrepreneur peut utiliser à cette fin son propre matériel d'inspection ou celui de tout autre établissement acceptable au gouvernement du Canada ou à son représentant. Le gouvernement se réserve le droit d'effectuer les inspections mentionnées dans la présente spécification, lorsqu'elles sont nécessaires pour garantir que le matériel et les services sont conformes aux exigences prescrites. L'incombe sera à l'entrepreneur d'assurer que les matériaux et les services soumis à l'approbation du gouvernement conformément à toutes les exigences énoncées dans le contrat.</p> <p>3.2 Essais. Les propriétés requises et les niveaux de performance sont décrits dans le tableau I. Les laboratoires indépendantes accréditées vécues pour les essais sur le cuir doivent procéder avec ces essais. Les résultats d'essais seront fourni au l'Autorité responsable de l'assurance de la qualité de la Ministère de défense national et doit être conforme à ceux qui est précisé au contrat.</p> <p>4 CONDITIONNEMENT</p> <p>4.1 Conditionnement et emballage. Sauf indication contraire, l'emballage et l'expédition doivent être conformes aux modalités du présent contrat.</p> <p>5 REMARQUES</p>
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<p>5.1 Definition of terms</p> <p>5.1.1 Design Authority. The Design Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Design Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM).</p> <p>5.1.2 Quality Assurance Authority (QAA). The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement</p> <p>5.1.3 DND green procurement. The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any, associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.</p>	<p>5.1 Définition des termes.</p> <p>5.1.1 Autorité responsable de la conception. Autorité gouvernementale responsable des aspects techniques de la conception et des modifications connexes. L'autorité responsable de la conception est la Direction de l'administration du programme de l'équipement du soldat (DAPES).</p> <p>5.1.2 Autorité responsable de l'assurance de la qualité. Organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur respectent les exigences prescrites. L'autorité responsable de l'assurance de la qualité sera précisée dans le contrat.</p> <p>5.1.3 Exigences du MDN relatives aux achats écologiques. La fabrication ou l'évaluation d'un produit conformément au présent devis pourrait nécessiter l'utilisation de matériaux ou d'équipement susceptibles d'être dangereux. La présente spécification n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement qui pourraient être associées à son utilisation. Il incombe à l'utilisateur du devis d'établir au préalable des méthodes appropriées qui tiennent compte des questions d'environnement, de santé et de sécurité, et de déterminer les restrictions réglementaires applicables.</p>
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Table I – Chemical Properties			
Properties (Moisture Free Basis)	Test Method	Requirements	
		Minimum	Maximum
Ash	ASTM D2617		10%
Fat (percent) Average (by Chloroform Extraction)	ASTM D3495	10%	25%
Chromic Oxide (CR2O3) (% on hide substance basis)	ASTM D2807	3.5%	
pH	ASTM D2810	3.0	

Table II – Physical Properties			
Properties (Moisture Free Basis)	Test Method	Requirements	
		Minimum	Maximum
Tensile Strength, Average	ASTM D2209	2500 psi (175.8 kg/cm)	
Tongue Tear Strength, Average*	ASTM D4704	20 lbs (9.06 kg)	
Shrinkage Temperature	ASTM D6076	97 o C	
* Average Tongue Tear Strength result is based on testing a 4 oz (1.59 mm) substance of leather			

Tableau I – Propriétés chimiques			
Propriétés (base libre d'humidité)	Methode d'essais	Exigences	
		Minimum	Maximum
Ash	ASTM D2617		10%
Fat (percent) Average (by Chloroform Extraction)	ASTM D3495	10%	25%
Chromic Oxide (CR2O3) (% on hide substance	ASTM D2807	3.5%	

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basis)			
pH	ASTM D2810	3.0	

Tableau II – Propriétés physiques			
Propriétés (base libre d'humidité)	Methode d'essais	Exigences	
		Minimum	Maximum
Tensile Strength, Average	ASTM D2209	2500 psi (175.8 kg/cm)	
Tongue Tear Strength, Average*	ASTM D4704	20 lbs (9.06 kg)	
Shrinkage Temperature	ASTM D6076	97 o C	
* Average Tongue Tear Strength result is based on testing a 4 oz (1.59 mm) substance of leather			

NOTICE



This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

PURCHASE DESCRIPTION

FOR

**CLOTH, COTTON, DUCK, UNBLEACHED,
PLIED YARNS**

DESCRIPTION D'ACHAT

**TISSU, COTON, COUTIL, ECRUS,
FILS RETORS**

1. SCOPE

1.1 Scope. This purchase description covers the requirements for unbleached cotton duck woven with plied yarns.

2. APPLICABLE DOCUMENTS

2.1 Government documents. Not applicable.

2.2 Other publications. The following publications form part of this purchase description to the extent specified herein. The effective dates shall be those in effect on the date of the publication of this purchase description. Source is as shown.

CAN/CGSB-4.2 Textile Test Methods
Canadian General Standards Board
Place du Portage III, 6B1
11 Laurier Street
Gatineau, Quebec K1A 1G6
Telephone: 819-956-0425 or 1-800-665-2472
Email: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca
Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

2.3 Sealed patterns. Not applicable.

1. PORTÉE

1.1 Portée. Cette description d'achat vise les exigences pour les coutils de coton écrus tissés à l'aide de fils retors.

2. DOCUMENTS APPLICABLES

2.1 Documents du gouvernement. Sans objet.

2.2 Autres publications. Les publications suivantes font partie intégrante de la présente description d'achat selon les modalités indiquées ci-après. La date d'entrée en vigueur doit être celle en vigueur à la date de publication de la présente description d'achat. La source de diffusion est celle indiquée.

CAN/CGSB-4.2 Méthodes pour épreuves textiles
Office des normes générales du Canada
Place du Portage III, 6B1
11, rue Laurier
Gatineau (Québec) K1A 1G6
Téléphone: 819-956-0425 or 1-800-665-2472
Courriel: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca
Site internet: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-fra.html>

2.3 Modèles réglementaires. Sans objet.



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2.4 Order of precedence.

2.4.1 In the event of any inconsistency in contract documents such as contract, purchase description and sealed pattern, the order of precedence shall be contract, purchase description, and sealed pattern.

2.4.2 In the event of a conflict between the text of this purchase description and the references cited herein, the text of this purchase description shall take precedence.

2.4.3 In the event of inconsistency within this purchase description, including inconsistency between languages, the Design Authority (DSSPM 2-11) shall be contacted for clarification.

3. REQUIREMENTS

3.1 Workmanship. The material covered by this purchase description shall be free of imperfections or blemishes such as may adversely affect its appearance or serviceability. For inspection purposes, imperfections and blemishes shall be considered defects when clearly visible at a normal inspection distance of approximately 1 metre under good, preferably North Light, lighting conditions.

3.2 Sealed pattern. A sealed pattern, when available, will be supplied to the successful bidder. Sealed patterns shall constitute the standard only in regard to any properties not defined in this purchase description. Note, however, that the order of precedence prevails (paragraph 2.4). Sealed patterns must be returned to the Crown and under no circumstances shall be mutilated or cut.

3.3 Yarns. Yarns in both the warp and weft shall be 100% cotton.

3.4 Fabric. The fabric shall be a plain weave. When tested in accordance with the applicable test methods, the finished fabric shall comply with the requirements specified in Table I.

3.5 Colour. Colour shall be as specified in the procurement documents. The colour required shall match the applicable sealed pattern or numerical colour co-ordinates, whichever is specified. All visual colour matching to sealed patterns shall be done in accordance with CAN/CGSB-4.2 No.41 Standard Light Sources for Colour Matching of Textiles. A colour match under north-sky daylight is the most

2.4 Ordre de préséance.

2.4.1 En cas d'incohérence entre les documents contractuels, soit le contrat, la description d'achat et les échantillons réglementaires, l'ordre de préséance est le suivant: le contrat, la description d'achat et les échantillons réglementaires.

2.4.2 En cas de divergence entre les documents mentionnés aux présentes et le contenu de la présente description d'achat, cette dernière a préséance.

2.4.3 En cas d'incohérence dans l'énoncé de la description d'achat, incluant l'incohérence entre les langues, il faut communiquer avec l'autorité responsable de la conception (DAPES 2-11) pour obtenir des précisions.

3. EXIGENCES

3.1 Qualité d'exécution. Le tissu visé par la présente spécification doit être exempt de défauts pouvant nuire à son aspect ou à sa tenue en service. À des fins d'inspection, sont considérés comme défauts ceux qui sont clairement visibles à une distance d'inspection normale d'environ un mètre sous un bon éclairage, de préférence la lumière du nord.

3.2 Modèle réglementaire. Un modèle réglementaire, lorsque disponible, sera fourni au soumissionnaire retenu. Il doit constituer le modèle normalisé en ce qui a trait seulement à toute propriété non définie dans la présente description d'achat. Nota – L'ordre de préséance (paragraphe 2.4) doit être respecté. Les modèles réglementaires doivent être renvoyés au gouvernement et ne doivent en aucun cas être endommagés ni coupés.

3.3 Fils. La chaîne et la trame doivent être des fils 100% coton.

3.4 Tissu. Le tissu doit être à armure unie. Lorsqu'il est mis à l'essai conformément aux méthodes d'essai prescrites, le tissu fini doit être conforme aux exigences du tableau I.

3.5 Couleur. La couleur doit être celle précisée dans les documents d'achat. Elle doit correspondre au modèle réglementaire applicable ou aux couleurs numériques coordonnées, selon le cas. L'appariement visuel des couleurs avec les modèles réglementaires doit être effectué conformément à la norme CAN/CGSB-4.2 no 41, Sources normalisées de lumière pour l'appariement des couleurs des textiles.

important measurement. Metamerism shall be no greater than that exhibited by the sealed pattern.

3.6 Length. Unless otherwise specified, the cloth shall be delivered in pieces of approximately 100 m with not more than two lengths per piece, the shorter of which shall be not less than 20 m.

3.7 Piece marking. Each piece shall have a label attached to the selvedge at one end. The label shall be made of linen, spun-bonded olefin or heavy cardboard with a reinforced eyelet for attaching a tying cord. The label shall be legibly printed with the following information:

- (a) Contractors identification
- (b) Gross length in metres (including allowance)
- (c) Net length in metres
- (d) Piece number
- (e) Number of lengths per piece
- (f) Nomenclature
- (g) Colour
- (h) Purchase description number
- (i) Contract number, month and year

4. QUALITY ASSURANCE PROVISIONS

4.1 Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure material and services conform to prescribed requirements. The contractor is responsible for ensuring that all material or services submitted to the Government for acceptance comply with all requirements of the contract.

5. PACKAGING

5.1 Packaging and packing. Packaging, packing, marking and delivery of shipping containers shall be in accordance with the terms of the contract.

L'appariement des couleurs sous la lumière du nord est le principal critère. Le métamérisme ne doit pas dépasser celui du modèle réglementaire.

3.6 Longueur. Sauf indication contraire, le tissu doit être livré en pièces d'environ 100 m de longueur avec au plus deux longueurs par pièce, dont la plus courte ne doit pas être inférieure à 20 m.

3.7 Marquage des pièces. Chaque pièce doit porter, à une extrémité, une étiquette fixée à la lisière. L'étiquette doit être en toile de lin, en oléfine thermoliée ou en carton fort et percée d'un œillet renforcé permettant d'attacher une ficelle. L'étiquette doit porter les indications suivantes en caractères lisibles:

- a) Nom de l'entrepreneur
- b) Longueur brute en mètres (y compris la tolérance)
- c) Longueur nette en mètres
- d) Numéro de la pièce
- e) Nombre de longueurs par pièce
- f) Nomenclature
- g) Couleur
- h) Numéro de la description d'achat
- i) Numéro, mois et année du contrat

4. DISPOSITIONS D'ASSURANCE DE LA QUALITÉ

4.1 Sauf indication contraire dans le contrat ou les documents d'achat, l'entrepreneur est tenu d'effectuer les inspections mentionnées dans la présente description d'achat. Il peut utiliser à cette fin son propre matériel d'inspection ou celui de tout autre établissement acceptable aux yeux du Gouvernement ou à son représentant. Le Gouvernement se réserve le droit d'effectuer les inspections mentionnées dans la présente description d'achat, lorsqu'elles sont nécessaires pour assurer que le matériel et les services sont conformes aux exigences prescrites. L'entrepreneur doit s'assurer que le matériel et les services proposés au Gouvernement sont conformes aux exigences du contrat.

5. CONDITIONNEMENT

5.1 Conditionnement et emballage. Le conditionnement, l'emballage, le marquage et la livraison des contenants d'expédition doivent être conformes aux modalités du contrat.

6. NOTES

6.1 Ordering data. Procurement documents should specify the following:

- a) Title, number and date of this purchase description
- b) Colour required (see 3.5)
- c) Packing and marking of shipping containers (see 5.1)
- d) The Design Authority
- e) The Quality Assurance Authority

6.2 Definition of Terms.

6.2.1 Design Authority. The Design Authority is the Government agency responsible for technical aspects of design and changes to design. The Design Authority, for the items covered by this purchase description, is the Directorate of Soldier Systems Program Management (DSSPM).

6.2.2 Quality Assurance Authority. The Quality Assurance Authority is the Government agency responsible for providing assurance that material and services supplied by the contractor conform to specified requirements. The Quality Assurance Authority is the Director Quality Assurance.

6.2.3 Master sealed pattern. A master sealed pattern is the authorized prototype of the item to be produced and is held only by the Government.

6.2.4 Sealed pattern. A sealed pattern is a duplicate of the Master Sealed Pattern and is available to the manufacturer to be used as a guide in production.

6.3 The production of a product to this purchase description, or the evaluation of a product to this purchase description, may require the use of materials and/or equipment that could be hazardous. This purchase description does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this purchase description to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

6. NOTES

6.1 Données de commande. Les documents d'achat doivent préciser:

- a) Le titre, le numéro et la date de la présente description d'achat
- b) La couleur requise (voir 3.5)
- c) Les exigences relatives à l'emballage et au marquage des contenants d'expédition (voir 5.1)
- d) L'autorité responsable de la conception
- e) L'autorité responsable de l'assurance de la qualité

6.2 Définitions.

6.2.1 Autorité responsable de la conception. L'autorité responsable de la conception est l'organisme gouvernemental chargé des aspects techniques de la conception et des modifications connexes. Dans le cas de la présente description d'achat, il s'agit du directeur de l'Administration du programme de l'équipement du soldat (DAPES).

6.2.2 Autorité responsable de l'assurance de la qualité. L'autorité responsable de l'assurance de la qualité est l'organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur satisfont aux exigences prescrites. L'autorité responsable de l'assurance de la qualité est le directeur de l'assurance de la qualité.

6.2.3 Modèle réglementaire principal. Prototype autorisé de l'article qui doit être fabriqué et dont le gouvernement est le seul détenteur.

6.2.4 Modèle réglementaire. Copie exacte du modèle réglementaire principal mis à la disposition du fabricant qui doit l'utiliser comme un guide.

6.3 La fabrication d'un produit ou son évaluation conformément à la présente description d'achat peut nécessiter l'utilisation de matériel ou d'équipement dangereux. La présente description d'achat n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement liées à son utilisation. Il incombe à l'utilisateur de la présente description d'achat d'établir au préalable des méthodes appropriées qui tiennent compte des questions d'environnement, de santé et de sécurité, et de déterminer les restrictions réglementaires applicables.

Table I Requirements for Finished Fabric

Mass (Method 5.1) minimum	Non-fibrous material (Method 15**) maximum	Yarns per cm (Method 6*) minimum		Ply of yarn minimum		Breaking strength (Method 9.1*) minimum	
		Warp	Weft	Warp	Weft	Warp	Weft
240 g/m ²	2%	18	13	2	2	580 N	270 N
280 g/m ²	2%	18	13	2	2	600 N	355 N
320 g/m ²	2%	18	13	2	2	625 N	445 N
360 g/m ²	2%	18	13	2	2	690 N	535 N
400 g/m ²	2%	17	13	2	3	780 N	535 N
				3	2		
480 g/m ²	2%	17	12	3	3	980 N	780 N

* CAN/CGSB-4.2 Textile Test Methods


** CAN/CGSB-4.2 Method 15, aqueous and enzyme treatments only.

Tableau I Exigences relatives au tissu fini

Masse (Méthode 5.1) minimum	Matières non fibreuses (Méthode 15**) maximum	Contexture (Méthode 6*) minimum		Nombre de retors minimum		Résistance à la rupture (Méthode 9.1*) minimum	
		Chaîne	Trame	Chaîne	Trame	Chaîne	Trame
240 g/m ²	2%	18	13	2	2	580 N	270 N
280 g/m ²	2%	18	13	2	2	600 N	355 N
320 g/m ²	2%	18	13	2	2	625 N	445 N
360 g/m ²	2%	18	13	2	2	690 N	535 N
400 g/m ²	2%	17	13	2	3	780 N	535 N
				3	2		
480 g/m ²	2%	17	12	3	3	980 N	780 N

* CAN/CGSB-4.2 Méthodes pour épreuves textiles

** CAN/CGSB-4.2 Méthode 15, seulement les traitements en milieu aqueux et enzymatique.

<p>This documentation does not contain instructions originally</p> <p>AVIS</p> <p>Cette documentation</p> <p></p> <p>NOTICE</p> <p>has been reviewed by the technical authority and controlled goods. Disclosure notices and handling received with the document shall continue to apply.</p> <p>a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.</p>	<p>Annex C</p> <p>To: W8486-151779</p> <p>DSSPM 2-3-87-2104</p> <p>May 30, 2014</p> <p>Supersedes any versions prior to May 30, 2014</p>
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MANUFACTURING DATA

FOR

MITTENS, SHELL, EXTREME COLD WEATHER (ECW)

NSN: 8415-21-104-2104 A/A

1 SCOPE

1.1 **Scope.** This manufacturing data covers the materials, design, construction and inspection requirements for Mittens, Shell, ECW to be worn with Mittens, Insert, ECW NSN 8415-21-104-2079.

2 APPLICABLE DOCUMENTS

2.1 **Government Documents.** The following documents form part of this specification to the extent specified herein. Unless otherwise specified, the issue or amendment of documents effective for a particular contract shall be that in effect on the date of the applicable design list, the invitation to tender or the contract.

SPECIFICATIONS AND STANDARDS

DSSPM 2-2-80-047	Specification for Tape, Textile, Bias, Single Fold
DSSPM 2-2-PD-117a	Purchase Description for Cloth, Cotton, Duck, Unbleached, Plied Yarns –
D-80-001-091/SF-001	Cloth, Plain Weave, Nylon, 195 g/m ² and 230g/m ²

Appendices to this Manufacturing Data

OPI/BPR: DSSPM 2-13



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Appendix 1	DSSPM 2-3-LI-3-5 Leather Goat Skin, Aniline, Chrome Tanned, Gloving
Appendix 2	DSSPM 2-3-80-137 Leather, Cowhide, Split, Chrome Tanned

DRAWINGS

389365	Pattern – Small
389366	Pattern – Medium
389367	Pattern – Large
389368	Pattern – X-Large
389369	Pattern – Small and Medium
389370	Pattern – Large and X-Large
389364	Mitts, Shells, Winter, C1A1
389371	Face Warmer Assembly

2.2 Other Publications. The following documents form part of this specification to the extent specified herein. Effective dates must be those in effect on the date of manufacture. Source is shown.

*Canadian General Standards Board (CGSB) Sales Unit
Place du Portage, Phase III, 6B1
11 Laurier St,
Gatineau, Quebec, K1A 1G6
Phone: (819) 956-0425 or 1-800-665-2472 (Canada only)
Internet Address: ncr.cgsb-ongc@pwgsc.gc.ca*

CAN/CGSB-4.2-M	Textile Test Methods
CAN/CGSB 54.1-M	Stitches and Seams, Part 1 and 2
CAN/CGSB-86.1-2003	Care Labelling of Textiles
CAN/CGSB 4-GP-85	Bonded nylon, Thread

2.3 Master Sealed Pattern

DCGEM 379-72	Mitten, Shell, Extreme Cold Weather
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2.4 **Paper Patterns.** DND will provide the paper patterns for all sizes under Style Code ARCMIT33. Size Medium will be used for tendering purposes.

2.5 Order of Precedence

2.5.1 In the event of conflict between the documents referenced herein and the contents of this specification, the contents of this specification shall be considered a superseding requirement.

2.5.2 In the event of inconsistency within this specification, the Design Authority must be contacted for clarification.

2.5.3 In the event of inconsistency in the contract documents such a contract, specification or sealed patterns, the order of precedence shall be contract, specification and sealed patterns.

2.5.4 The contents of this document do not supersede applicable laws and regulations, unless a specific exemption has been obtained.

3 REQUIREMENTS

3.1 **Definition of product.** The Mitten, Shell, ECW must be in the accordance with the Sealed Pattern DCGEM 379-72 and must incorporate the following features:

- a. Cream coloured leather with a white cloth gauntlet;
- b. Curved palm with sidewall pieces;
- c. Elasticized wrist;
- d. Adjustable strap closure on the gauntlet;
- e. Face warmer on the back of the hand; and
- f. Snaps to anchor to the Mitten, Insert, ECW.

3.2 **Paper patterns.** The pattern for cutting the mitt insert must be in strict accordance with the Government pattern supplied to the successful bidder.

3.3 **Tooling.** The Government does not supply tooling.

3.4 **Size Range.** The paper patterns for the Mittens, Shell, ECW shall be available in four (4) sizes: Small, Medium, Large and X-Large. The quantity and sizes will be specified in the procurement documents.

3.5 **Sealed Pattern.** A sealed pattern, when available will be supplied to the successful tenderer. This will be used for all factors not covered by this specification.

3.6 **Materials**

3.6.1 **Leather**

3.6.1.1 The leather for the palm, back, thumb, carrying loop and sidewalls must be Chrome Tanned Goatskin Leather in accordance with Annex C Appendix 1. The thickness must be 1.1 mm +/- 0.1mm (2-3/4 ounces +/- 1/4 oz). The colour must be Cream. Slight variations in colour will be accepted providing the mittens are matched pairs.

3.6.1.2 The leather for the palm and thumb welting and the cuff stiffening strips must be Cowhide, Split, Chrome Tanned in accordance with DSSPM 2-3-80-137, attached with Annex C Appendix 2.

3.6.2 **Face Warmer.** The material for the face warmer must be cloth, wool, single face, 630 g/m². The colour must be natural. Unless otherwise specified in the procurement documents, the cloth will be Government supplied material (GSM) NSN 8305-21-874-1016.

3.6.3 **Bias Binding.** The bias binding must be made from plain weave cotton conforming to the requirements of DSSPM 2-2-80-047 Type II. The material must be cut on a 45° angle into strips 25mm +/- 0.8mm in width and folded into the centre to give a finished width of 12.7 mm +/- 0.8mm. The colour of the binding must be white.

3.6.4 **Elastic.** The elastic must be braided; 19 mm wide covered with 2 ply 20 ECC Natural Cotton. The elastic must have a minimum stretch of 170%. The elastic must have a minimum of 16 ends of #40 rubber.

3.6.5 **Cuff.** The cuff must be made from continuous filament nylon yarns and must meet the requirements D-80-001-091/SF-001 attached as Appendix A to Appendix 3. The colour must be white.

3.6.6 **Cuff Interlining.** The cuff interlining must be cut from an unbleached cotton duck in accordance with Annex C Appendix 3: DSSPM 2-2-PD-117a. The material must have a minimum weight of 400 g/m².

3.6.7 **Cuff straps, loops and tabs.** The material for the cuff straps, loops and tabs must be 100 % nylon webbing, 13 mm wide in accordance with Table I.

Table I – Requirements for strap, loop and tab webbing

Properties	Requirements
Type of Weave	Plain double weave
Ground Ends	65 x 810 denier Nylon
Binder Ends	14 x 810 denier Nylon
Weft Ends	410 denier Nylon, 7.5 picks/cm, 2 picks/shed
<u>Dimensions:</u>	
Width	13 mm +/- 1.00 mm
Thickness	1 mm +/- 0.25 mm
Colour	White

3.6.8 Thread.

3.6.8.1 **Top Thread.** Thread shall be bonded nylon in accordance with CAN/CGSB 4-GP-85, Type 2, Class A, Tex 70. Thread shall meet the physical requirements specified in Table 2 of CAN/CGSB 4-GP-85 for Tex Ticket No. R 70 tex.

3.6.8.2 **Bottom Thread** shall be bonded nylon in accordance with CAN/CGSB 4-GP-85, Type 2, Class A, Tex 45. Thread shall meet the physical requirements specified in Table 2 of CAN/CGSB 4-GP-85 for Tex Ticket No. R 50 tex.

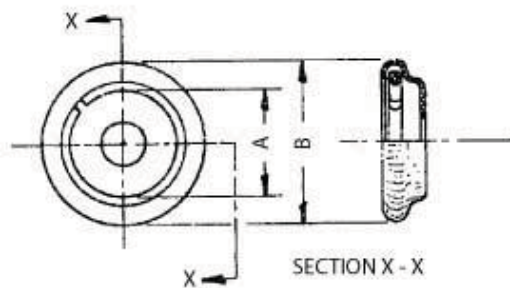
Table II – Thread Sizes

Operation	Top Thread Size	Bottom Thread Size
Closing, cuff, carrying loop, loop. Tab, strap and buckle-attaching	E (T-70)	C (T-45)

Bias binding, face warmer and elastic attaching	E (T-70)	C (T-45)
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3.6.9 Buckle. The buckle must be a commercially available Acetyl, 5/8-inch ladder lock style. Texfast Group Ltd. Part No. P004 - PLA-1645 is known to meet this requirement. Equivalent products will be considered as long as they are Acetyl and have approximately the same overall dimensions. The colour must be white.

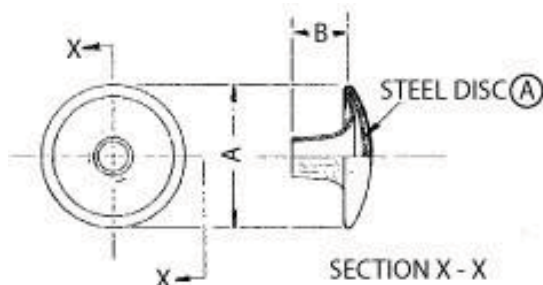
3.6.10 Snap fasteners. The button fasteners must be brass with a white enamel finish. The snap fasteners must be regular spring clamp type in brass with nickel plating, with a phosphor bronze spring, in accordance with the following:



3.6.10.1 Socket Fastener

Inside diameter – Dim A	Outside diameter – Dim B
9.34 mm	14.4 mm

Texfast Group Ltd. Part No. PRY-2000 has been known to meet this requirement.



3.6.10.2 Button Fastener

Dim A		Dim B
Ligne	Dia	Barrel Length
24	15.39 mm	3.0 mm

Texfast Group Ltd. Part No. PRY-1000 has been known to meet this requirement.

3.6.11 Welting. The welting for the thumb and palm must be cut from the leather specified. The welting must be 4.8 mm +/- 0.8mm in width. All joints must be beveled and cemented tightly together. Welting must be continuous with not more than one joint in either palm or thumb. Where ends are joined, the joining must leave a smooth and serviceable joint.

3.7 Cutting. The component parts of the shell must be cut from the leathers specified with the use of dies and/or patterns specified. The components must be cut parallel to the backbone of the goat skin in order to obtain maximum flexibility and fit in the finished mitt. The palm, back, thumb and sidewalls must be cut from only the best portion of the butt and must be free from any flakiness or soft spots and must meet the specified thickness requirements.

3.8 Sewing. All stitching must be lock stitch Type 301 in accordance with CAN/CGSB 54.1-M. In case of trimmer equipped machines, the trimmer must not be used. The lock stitching must be 9 to 11 stitches per inch. The beginning and ending of all seams must be securely back tacked for at least 19 mm (3/4-in).

3.9 Fitting and Closing

3.9.1 Sidewall, palm and back. The two sidewalls must be inseam stitched (seam type 1.01.01) together at the fingertip part of the mitt with seam allowance of 3.2 mm +/- 0.8 mm. The back of the mitt must overlap the two sidewalls (seam type 2.01.01) by a minimum of 4 mm to a maximum of 6 mm and must be top stitched to the side walls with one row of continuous stitching placed 1.5mm +/- 0.8 mm from the edge of the back. The palm and the back of the thumb must be sewn to the sidewalls with the use of the welting (seam type 1.11.01). The edges of the palm, back of the thumb, welt and the sidewall must be flush and stitched together with one row of stitching, seam allowance of 2.3 mm +/- 0.8 mm. The welting must end 25mm above the bottom of the leather palm.

3.9.2 **Thumb.** The thumb must be fully welted and sewn (seam type 1.11.01) to the palm with one row of stitching, seam allowance 1.5 mm +/- 0.8 mm. The edges of the palm, thumb and the welting must be flush.

3.9.3 **Face warmer.** The face warmer must be cut according to the paper pattern. The face warmer must have its edges bound with the specified bias binding. After the edges have been bound, the face warmer must be centred on the back of the hand portion of the mitt and sewn all around with one row of lock stitch placed approximately 3.0 mm from the edge.

3.9.4 **Elastic.** The elastic specified must be centred approximately 3.8 cm below the top edge of the palm and sewn to the palm and back of the thumb in the stretched state with one row of lock stitch (seam type 5.04.03). The ends of the elastic must be caught in the shell closing stitching.

3.9.5 **Cuff stiffening strips.** Each cuff must have six stiffening strips cut from the leather specified. Each strip must be 12.7 mm +/- 1.5 mm in width, 13.3 cm +/- 3.2 mm in length. The strips must be placed in a vertical position on the underside of the interlining. There must be three strips evenly spaced, on the back portion of the cuff and three strips evenly spaced on the front portion of the cuff. The strips must be sewn on place to the interlining with one row of stitching placed approximately 2.3 mm from the four edges of each strip.

3.9.6 **Cuff and interlining.** After the stiffening strips have been sewn to the interlining, the ends of the interlining must be sewn to the cuff, with one row of stitching placed approximately 3.2 mm from the edge. The two vertical sides of the cuff must be seamed together with one row of stitching 4.8 mm from the edge. The depth of the cuff must be folded in half to form two plies and the inside bottom raw edge folded over the outer surface for a distance of 8 mm and sewn with a row of stitching 4mm from the edge. The bottom edge of the interlining must be stitched to the doubled cuff with one row of stitching placed a minimum 4.8 mm to a maximum of 6.3 mm from the folded top edge of the cuff. The cuff must be attached to the shell, with the leather overlapping a minimum of 11.2 mm to a maximum of 12.7 mm with two rows of stitching. The first row of stitching must be placed 1.5 mm +/- 0.8 mm from the edge of the leather. The two rows of stitching at 3.2 mm gauge.

3.9.7 **Straps, loops, tabs and buckles.** Each mitt must a cuff closure strap and buckle. The loops, tabs and straps must be cut and sewn in accordance with Figure 4 and the sealed sample. The buckles must be as specified. The straps, tabs and loops and buckles must be positioned on the back of the mitt as shown in this drawing. The strap, tab and loop ends must be folded and securely stitched to the cuff in the manner shown in this drawing.

3.9.8 **Fasteners.** The fasteners must be positioned on the cuff at equally spaced points, effecting proper attachment with the Mitt insert, as per the sealed sample. The fasteners must be attached firmly and smoothly. There must be four fasteners on each cuff positioned.

3.9.9 **Carrying loop.** The carrying loop must be 19 mm +/- 0.8 mm in width and 12.7 mm +/- 3.2 mm in length. The loop must be doubled, flesh- to- flesh, and positioned at the top of the cuff as shown in Figure 2 and the sealed sample. The loop must be securely attached to the cuff with one row of stitching forming a rectangle approximately 15.8 mm by 19 mm. This row of stitching must continue corner to corner, to form an X within the rectangle.

3.10 **Finishing.** After closing, the mitts must be blocked and shaped on suitably shaped heated forms.

3.11 **Pairing.** The mitts must be paired and fastened together about 13 mm (7/8 in) from the end of the closing seams with commercially available plastic string fastener..

3.12 **Marking.** Each shell must have the following information legibly and indelibly inscribed in numerals and letters 6.4 mm to 9.5 mm in height on the back of the cuff:

a. Nomenclature in English and French as follows:

MITTENS, SHELL, ECW

COQUILLES POUR MITAINES, TGF

b. Size / taille

c. Year of manufacture; année de fabrication

d. Contract number; numéro du contrat

e. NATO Stock number / numéro de nomenclature de l'OTAN

f. Surface wash, do not dryclean / Nettoyer surface, ne pas nettoyer à sec.

4 QUALITY CONTROL/INSPECTION

4.1 Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to

perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services conform to prescribed requirements. The contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.

4.1 Pre-Production Samples. When specified in the contract, the contractor shall be required to submit pre-production samples. Pre-production samples must be completely representative of the final product and must be made from the components and materials specified, using equipment and process to be used on quantity production.

5 PACKAGING

5.1 Packaging and packing. Unless otherwise specified, packaging and packing as well as delivery must be in accordance with the terms of the contract.

6 NOTES

6.1 Definition of terms

6.1.1 Design Authority. The Design Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Design Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM)

6.1.2 Quality Assurance Authority (QAA). The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement

6.1.3 Master Sealed Pattern. The Master Sealed Pattern is the only authorized prototype of the item to be produced, and is held by the Government.

6.1.4 Sealed Pattern. The sealed pattern is a duplicate of the master sealed pattern, which is the Department of National Defence's authorized prototype of the item to be produced. Sealed patterns are available for the contractor's use as a *guide to production*. Contractors should note that sealed patterns may not incorporate all the details cited in this specification and that the order of precedence prevails.

6.1.5 DND green procurement. The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any, associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and

This documentation has been reviewed by the technical authority and does not contain controlled goods

Annex C

To: W8486-151777

DSSPM 2-3-87-2104

May 30, 2014

environmental practices and to determine the applicability of regulatory limitations prior to use.

Size Roll for Mittens Shell, Extreme Cold Weather

NATO Stock Number	Size
8415-21-104-2104	A/A
8415-20-004-1275	Small
8415-21-510-5951	Medium
8415-21-510-5952	Large
N/A	X-Large





This documentation
does not contain
instructions originally

AVIS

Cette documentation



NOTICE

has been reviewed by the technical authority and
controlled goods. Disclosure notices and handling
received with the document shall continue to apply.

a été révisée par
l'autorité technique et ne
contient pas de marchandises contrôlées. Les avis de divulgation et les
instructions de manutention reçues originalement doivent continuer de
s'appliquer.

Annex D

To: W8486-151777

DSSPM 2-3-87-2079

May 30, 2014

Supersedes any versions
prior to

May 30, 2014

**MANUFACTURING DATA
FOR
MITTENS, INSERT, EXTREME COLD WEATHER (ECW)**

NSN 8415-21-104-2079 A/A

1 SCOPE

1.1 **Scope.** This manufacturing data covers the materials, design, construction and inspection requirements for Mittens, Insert, ECW to be worn with Mittens, Shell, ECW NSN 8415-21-104-2104

2 APPLICABLE DOCUMENTS

2.1 **Government Documents.** The following documents form part of this specification to the extent specified herein. Unless otherwise specified, the issue or amendment of documents effective for a particular contract must be that in effect on the date of the applicable design data list, the invitation to tender or the contract.

SPECIFICATIONS AND STANDARDS

DSSPM 2-2-80-042 Specification for Cloth, Melton, Wool, 375 g/m²

DSSPM 2-2-PD-117a Purchase Description for Cloth, Cotton, Duck, Unbleached,
Plied Yarns

2.2 DRAWINGS

OPI/BPR: DSSPM 2-13



389372	Pattern, Small
389373	Pattern, Medium
389374	Pattern, Large
389375	Pattern, Extra Large

2.3 Other Publications. The following documents form part of this specification to the extent specified herein. Effective dates shall be that in effect on the date of manufacture, Source is as shown.

*Canadian General Standards Board (CGSB) Sales Unit
11 Laurier Street
Place du Portage, Phase III
Gatineau, Quebec K1A 1G6*

*Phone: (819) 956-0425 or 1-800-665-2472 (Canada only)
Fax: (819) 956-5644
Internet Address: ncr.cgsb-ongc@pwgsc.gc.ca*

CAN/CGSB 4-GP-85	Bonded nylon, Thread
CAN/CGSB-54.1-M	Stitches and Seams, Part I and II
CAN/CGSB-86.1-2003	Care Labelling of Textiles

2.4 Master Sealed Pattern

DCGEM 380-72	Mittens, Inserts, Extreme Cold Weather
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2.5 Paper Patterns. DND will provide the paper patterns for all sizes under Style Code ARCINS33. Size Medium will be used for tendering purposes.

2.6 Order of Precedence

2.6.1 In the event of conflict between the documents referenced herein and the contents of this specification, the contents of this specification shall be considered a superseding requirement.

2.6.2 In the event of inconsistency within this specification, the Design Authority must be contacted for clarification.

2.6.3 In the event of inconsistency in the contract documents such a contract, specification or sealed patterns, the order of precedence must be contract, specification and sealed patterns.

2.6.4 The contents of this document do not supersede applicable laws and regulations, unless a specific exemption has been obtained.

3 REQUIREMENTS

3.1 **Definition of product.** The Mitten, Insert, ECW must be in accordance with the Sealed Pattern DCGEM 380-72 and must incorporate the following features:

- a. Slip-on gauntlet style mitt with sidewalls
- b. Flared gauntlet lined with cotton duck
- c. Quilted lining with insulation
- d. Lined in its entirety with Olive Green coloured wool melton
- e. Male snaps at cuff for attachment to Mitten Shells, ECW

3.2 **Paper patterns.** The pattern for cutting the mitt insert must be in strict accordance with the Government pattern supplied to the successful bidder.

3.3 **Size range.** The Mitten, Insert, ECW must be available in four (4) sizes: Small, Medium, Large and Extra-Large. The quantity and size required will be specified in the procurement documents.

3.4 **Sealed Pattern.** A sealed pattern, when available will be supplied to the successful tenderer. This will be used for all factors not covered by this specification.

3.5 Materials

3.5.1 **Palm, back, thumb and sidewalls.** The palm, back, thumb and sidewalls must be cut from a quilted fabric consisting of:

- a) The thermal insulation must be a batting of man made and natural fibres including binder fibre and acrylic resin. The batting must have a weight of 150 g/m2 +/- 10%. Matador part # BMDW 150 from Matador Converters Co. Ltd., 270 rue de LOUVAIN O., Montreal, PQ H2N 1B6 Tel: 514-389-8221 has been known to meet this requirement.

- b) Nylon or polyester spun bonded, non-woven, scrim backing, maximum weight of 20 g/m²
- c) Cloth, nylon, taffeta with a minimum weight of 84 g/m². Colour must be Olive Green. Unless otherwise stated in the procurement documents, this material will be Government supplied material (GSM) NSN 8305-21-874-1049.

3.5.1.1 Quilted fabric construction. The quilted fabric must consist of one layer of batting specified, smoothly and evenly spread between one layer of nylon taffeta and one layer of non-woven scrim. The layers must be quilted together using lock stitch in accordance with CAN/CGSB-54.1, using 4-5 stitches per cm (10-13 spi) with a 50mm +/- 3mm diamond stitch pattern. The palm, back, thumb and sidewall will be cut from the quilted material.

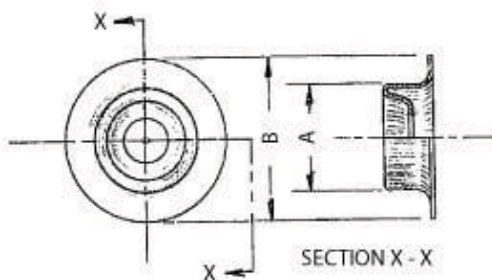
3.5.2 Lining for palm, back thumb, sidewall and gauntlet. The cloth must be a wool melton, 375 g/m² in accordance with DSSPM 2-2-80-042 and sealed pattern DCGEM 260-85. The colour must be Canadian Average Green in accordance with sealed pattern DSSPM 281-01.

3.5.3 Cuff Stiffener. The cuff must be unbleached cotton duck in accordance with Annex C Appendix 3: DSSPM 2-2-PD-117a. The fabric must have a minimum weight of 400 g/m².

3.5.4 Thread. Thread shall be bonded nylon in accordance with CAN/CGSB 4-GP-85, Type 2, Class A, Tex 45. Thread shall meet the physical requirements specified in Table 2 of CAN/CGSB 4-GP-85 for Tex Ticket No. R 50 tex.

3.5.5 Snap Fasteners

3.5.5.1 Stud Fasteners. The fasteners must be brass and nickel plated. The construction details must be in accordance with the following:

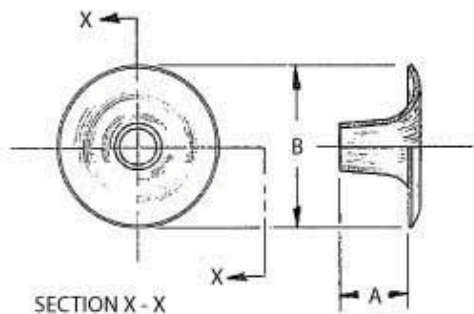


Stud Fastener

Diameter A	Flange diameter – Dim B
10.0 mm	14.0 mm

Texfast Group Ltd. Part No PRY-3000 has been known to meet these requirements.

3.5.5.2 Eyelet fasteners. The fasteners must be brass and nickel plated. The construction details must be in accordance with the following:



Eyelet Fastener

Barrel Length Dim A	Flange Diameter Dim B
5.54 mm	13.68 mm

Texfast Group Ltd. Part No. PRY-4000 has been known to meet these requirements.

3.6 Cutting. All components of the mitt insert must be cut with the paper pattern specified in section 2.4.

3.6.1 Palm, back, thumb and sidewalls. The palm, back, thumb and sidewalls must be cut from the quilted materials specified in section 3.5.1.

3.6.2 The lining for the palm, back, thumb, sidewall and cuff must be cut from the Cloth Melton specified in 3.5.2.

3.6.3 The cuff stiffener must be cut from the fabric specified at 3.5.3.

3.7 Sewing.

3.7.1 **Stitching.** Stitching must be in accordance with CAN/CGSB-54.1. In case of trimmer-equipped machines, the trimmer must not be used.

3.7.2 Lock stitching must be Type 301, 3-5 stitches per cm (8-12 spi). The stitching in the quilting operation must be 4-5 stitches per cm (10-13 spi). Seam allowances must be 4 mm, unless otherwise specified. The beginning and end of all seams must be securely back stitched for at least 19mm (3/4-in)

3.7.3 **Serging.** Serging must be Type 504 or 505, with a minimum of three (3) threads, 3-4 stitches per cm (8 to 10 spi). The bight must be sufficiently wide to ensure the edges are securely caught in the serging.

3.8 **Construction.**

3.8.1 **Palm, back, thumb and sidewall.** The lining and matching quilted pieces specified in section 3.5.1 must be partnered with all edges flush, the nylon taffeta to the outside and lock stitched together around all sides at 3 mm ((1/8 in) gauge. The edges must then be serged.

3.8.2 The palm, back, thumb and sidewalls must be assembled and lockstitched together, around all edges at 4 mm gauge.

3.8.3 **Gauntlet.** The lining and the stiffener must be assembled with all edges flush and serged together. The gauntlet must be stitched to the hand of the insert.

3.8.4 The inserts must be closed on the last inseam.

3.8.5 There must be a hem measuring 31mm +/- 3mm (1-3/16 in +/- 1/8 in) on the longest edge of the cuff, turned toward the cotton duck side. The hem must be stitched 6 mm (1/4 in) from the serged edge.

3.8.6 **Fasteners.** All fasteners must be carefully positioned and attached firmly and smoothly to the hemmed portion of the cuff, as shown in Figure 2. There must be four (4) fasteners on each mitt. The fasteners must be compatible with the snap fasteners on the Mitten Shells, ECW.

3.9 **Finishing.** After closing, the mitts must be blocked and shaped on suitably shaped and heated forms.

3.10 **Pairing.** The inserts must be paired and fastened together about 13 mm (7/8 in) from the end of the closing seam with a commercially available plastic string fastener.

3.11 **Marking and Labels .** Each insert must have the following information legibly and indelibly inscribed in numerals and letters 6.4 mm to 9.5 mm in height, on the inside (cotton duck) of the cuff, on the hand back. The colour of the printing must be black.

- a. Nomenclature in English and French as follows:

MITTENS, INSERT, ECW
DOUBLURES AMOVIBLES POUR MOUFLES, TGF

- b. Size / taille
- c. Year of manufacture; année de fabrication
- d. Contract number; numéro du contrat
- e. NATO Stock number / numéro de nomenclature de l'OTAN

3.12 **QUALITY CONTROL/INSPECTION**

3.13 Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure materiel and services conform to prescribed requirements. The contractor is responsible for ensuring that all materiel or services submitted to the Government for acceptance comply with all requirements of the contract.

3.14 **Pre-Production Samples.** When specified in the contract, the contractor shall be required to submit pre-production samples. Pre-production samples must be completely representative of the final product and must be made from the components and materials specified, using equipment and process to be used on quantity production.

3.15 **PACKAGING**

3.16 **Packaging and packing.** Unless otherwise specified, packaging as well as delivery, must be in accordance with the terms of the contract.

3.17 **NOTES**

3.18 **Definition of terms**

3.19 **Design Authority.** The Design Authority is the Government agency responsible for the technical aspects of the design and changes to design. The Design Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM) 2-3, Department of National Defence.

3.20 **Quality Assurance Authority (QAA).** The QAA is the Government agency responsible for providing assurance that materiel and services supplied by the contractor conform to specified requirements. The QAA will be specified in the procurement

3.21 **Scaled Pattern.** The sealed pattern is a duplicate of the master sealed pattern, which is the Department of National Defence's authorized prototype of the item to be produced. Sealed patterns are available for the contractor's use as a guide to production. Contractors should note that sealed patterns may not incorporate all the details cited in this specification and that the order of precedence prevails.

3.22 **DND green procurement.** The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use

Annex D
To: W8486-151777
DSSPM 2-3-87-2079
May 30, 2014

SIZE ROLL FOR MITTENS, INSERT, EXTREME COLD WEATHER

NATO Stock Number	Size
8415-21-104-2104	A/A
8415-20-004-1494	Small
8415-21-510-5961	Medium
8415-21-510-5962	Large
	X-Large



NOTICE



This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

SPECIFICATION

FOR

CLOTH, PLAIN WEAVE, NYLON,

195 g/m² and 230 g/m²

SPÉCIFICATION

POUR LE

TISSU DE NYLON, ARMURE UNIE,

195 g/m² et 230 g/m²

1. SCOPE

1.1 Scope. This specification covers the requirements for Cloth, Plain Weave, Nylon, 195 g/m² and 230 g/m².

1.2 Classification. The fabric shall be classified as follows:

Type I Cloth, Plain Weave, Nylon,
195 g/m²

Type II Cloth, Plain Weave, Nylon,
Polyurethane Coated, 230 g/m²

2. APPLICABLE DOCUMENTS

2.1 Government Documents. Not Applicable.

2.2 Other Publications. The following documents form part of this specification to the extent specified herein. The effective date of the documents shall be those in effect on the date the publication of this specification. Sources are as shown.

1. PORTÉE

1.1 Portée. La présente spécification vise les exigences pour le tissu de nylon, armure unie, 195 g/m² et 230 g/m².

1.2 Classification. Les tissus doivent être classés comme suit :

Type I Tissu de nylon, armure unie,
195 g/m²

Type II Tissu de nylon, armure unie, enduit
de polyuréthane, 230 g/m²

2. DOCUMENTS APPLICABLES

2.1 Documents du gouvernement. Sans objet.

2.2 Autres publications. Les documents suivants font partie intégrante du présent document dans la mesure prescrite dans ce dernier. La version en vigueur doit être celle en vigueur à la date de publication de la présente spécification. La source de diffusion est celle qui est indiquée.

CAN/CGSB-4.2 Textile Test Methods

Canadian General Standards Board
Place du Portage III, 6B1
11 Laurier Street
Gatineau, Quebec K1A 1G6
Telephone: 819-956-0425 or 1-800-665-2472
Email: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca
Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

AATCC Textile Test Methods

American Association of Textile Chemists and Colourists
P.O. Box 12215
Research Triangle Park, NC
27709, USA
Telephone: 919-549-3526
Website: www.aatcc.org

CAN/CGSB-4.2 Méthodes pour épreuves textiles

Office des normes générales du Canada
Place du Portage III, 6B1
11, rue Laurier
Gatineau (Québec) K1A 1G6
Téléphone: 819-956-0425 or 1-800-665-2472
Courriel: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca
Site internet: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-fra.html>

AATCC Textile Test Methods

American Association of Textile Chemists and Colourists
P.O. Box 12215
Research Triangle Park, NC 27709
ÉTATS-UNIS
Téléphone : 919-549-3526
Site Web : www.aatcc.org

2.3 Sealed Patterns.

DCGEM 263-78	Cloth, Plain Weave, Nylon, 5.75 oz/yd ² For Colour International Orange NSN 8305-21-518-0008
DCGEM 261-85	Cloth, Tropical, Wool/Polyester, 200 g/m ² For Colour Tan NSN 8305-21-896-6150
DCGEM 301-85	Cloth, Plain Weave, Nylon, 195 g/m ² For Colour Air Force Blue and Finish NSN 8305-21-899-8154
DSSPM 276-01	Cloth, Plain Weave, Nylon For Colour Black NSN 8305-21-874-1042
DSSPM 281-01	Cloth, Twist, Cotton/Nylon, 170 g/m ² For Colour Canadian Average Green NSN 8305-21-874-1043
DSSPM 268-07	Cloth, Plain Weave, Nylon, 195 g/m ² , Type I Sealed for construction and finish for Type I

2.3 Modèles réglementaires.

DCGEM 263-78	Tissu de nylon, armure unie, 5,75 oz/v ² Pour la couleur orangé international NNO 8305-21-518-0008
DCGEM 261-85	Tissu, régions tropicales, laine/polyester, 200 g/m ² , havane Pour la couleur havane NNO 8305-21-896-6150
DCGEM 301-85	Nylon, armure unie, 195 g/m ² Pour le fini et la couleur bleu force arienne NNO 8305-21-899-8154
DSSPM 276-01	Tissu de nylon, armure unie Pour la couleur noir NNO 8305-21-874-1042
DSSPM 281-01	Tissu léger de nylon/coton simple retors, 170 g/m ² Pour la couleur vert canadien moyen NNO 8305-21-874-1043
DSSPM 268-07	Tissu de nylon, armure unie, 195 g/m ² , type I Pour la confection et le fini de type I

DSSPM 271-07 Cloth, Plain Weave,
Nylon, Polyurethane
Coated, 230 g/m², Type II
Sealed for construction
and finish for Type II

DSSPM 271-07 Tissu de nylon, armure
unie, enduit de
polyuréthane, 230 g/m²,
type II
Pour la confection et le
fini de type II

2.4 Order of Precedence.

2.4.1 In the event of any inconsistency in contract documents such as contract, specification and sealed pattern, the order of precedence shall be contract, specification, and sealed pattern.

2.4.2 In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

2.4.3 In the event of inconsistency within the specification, including inconsistency between languages, the Design Authority (DSSPM 2-11) shall be contacted for clarification.

3. REQUIREMENTS

3.1 Workmanship. The material covered by this specification shall be free of imperfections or blemishes such as may adversely affect its appearance or serviceability. For inspection purposes, imperfections and blemishes shall be considered defects when clearly visible at a normal inspection distance of approximately 1 metre under good, preferably North Light, lighting conditions.

3.2 Sealed Pattern. A Sealed Pattern, when available, will be supplied to the successful bidder. Sealed Patterns shall constitute the standard only in regard to any properties not defined in this specification. Note, however, that the order of precedence prevails (para 2.4). Sealed Patterns must be returned to the Crown and under no circumstances shall be mutilated or cut.

3.3 Yarns. The yarns shall be continuous filament nylon.

3.4 Fabric. The fabric shall be plain woven. When tested in accordance with the applicable test methods, the finished fabric shall comply with the requirements specified in Table I or Table II.

2.4 Ordre de préséance.

2.4.1 En cas d'incohérence entre les documents contractuels, soit le contrat, la spécification et les modèles réglementaires, l'ordre de préséance est le suivant : le contrat, la spécification et les modèles réglementaires.

2.4.2 En cas de divergence entre les documents mentionnés aux présentes et le contenu de la présente spécification, cette dernière a préséance.

2.4.3 En cas d'incohérence dans l'énoncé de la spécification, incluant l'incohérence entre les langues, il faut communiquer avec l'autorité responsable de la conception (DAPES 2-11) pour obtenir des précisions.

3. EXIGENCES

3.1 Qualité d'exécution. Le tissu visé par la présente spécification doit être exempt de défauts pouvant nuire à son aspect ou à sa tenue en service. À des fins d'inspection, sont considérés comme défauts ceux qui sont clairement visibles à une distance d'inspection normale d'environ un mètre sous un bon éclairage, de préférence la lumière du nord.

3.2 Modèle réglementaire. Un modèle réglementaire, lorsque disponible, doit être fourni au soumissionnaire retenu. Le modèle réglementaire doit être la norme en ce qui concerne les propriétés qui ne sont pas définies aux présentes. Nota – L'ordre de préséance (paragraphe 2.4) doit être respecté. Les modèles réglementaires doivent être renvoyés au gouvernement et ne doivent en aucun cas être endommagés ni coupés.

3.3 Fils. Les fils doivent être faits de filaments de nylon.

3.4 Tissu. La confection du tissu doit être à armure unie. Lors des essais réalisés conformément aux méthodes d'essai applicables, le tissu fini doit être conforme aux exigences prescrites au tableau I.

3.5 Colour. Colour shall be as specified in the procurement documents. The colour required shall match the applicable sealed pattern or numerical colour co-ordinates, whichever is specified. All visual colour matching to sealed patterns shall be done in accordance with CAN/CGSB-4.2 No.41 Standard Light Sources for Colour Matching of Textiles. A colour match under north-sky daylight is the most important measurement. Metamerism shall be no greater than that exhibited by the Sealed Pattern.

3.5.1 Canadian Average Green. When the contracting documents specify the colour as Canadian Average Green, the fabric shall be dyed to a uniform shade throughout and must comply with the technical requirements defined in Appendix I of this specification. The sample provided is Sealed Pattern DSSPM 281-01 which may be used as a visual starting point however all co-ordinates and Infra-red Reflection requirements stated in Appendix I must be met.

3.6 Finish.

3.6.1 Type I Unless otherwise specified in the invitation to tender, the finish shall be as depicted by Sealed Pattern DSSPM 268-07. The finished fabric shall meet the requirements specified in Table I.

3.6.2 Type II Type I fabric meeting all of the requirements specified in Table I shall be lightly coated with polyurethane and given a durable water repellent finish on the nylon side such that the finished cloth meets the requirements specified in Table II. The finished fabric shall be as depicted by Sealed Pattern DSSPM 271-07.

3.6.2.1 The coating compound shall be clear polyurethane, applied to the back side only of the base cloth.

3.7 Length. Unless otherwise specified, the cloth shall be delivered in lengths of approximately 100 metres with not more than two lengths per piece, the shorter of which shall be not less than 20 metres.

3.8 Piece Marking. Each piece of cloth shall have a label attached to the selvedge at one end. The label shall be made of linen, spunbonded olefin, or heavy cardboard with a reinforced eyelet for attaching a tying cord. The label shall be legibly printed with the following information:

3.5 Couleur. La couleur doit être celle qui est précisée dans les documents d'achat. Elle doit correspondre au modèle réglementaire applicable ou aux couleurs numériques coordonnées, selon le cas. L'appariement des couleurs visibles avec les modèles réglementaires doit être conforme aux exigences de la norme CAN/CGSB-4.2 No 41, Sources normalisées de lumière pour l'appariement des couleurs des textiles. L'appariement des couleur à la lumière du nord est le principal critère. Le métamérisme ne doit pas dépasser celui du modèle réglementaire.

3.5.1 Vert canadien moyen. Lorsque les documents contractuels prescrivent le vert canadien moyen, l'ensemble du tissu doit être teint de manière uniforme et être conforme aux exigences techniques définies à l'annexe I de la présente spécification. L'échantillon fourni est le modèle réglementaire DSSPM 281-01 qui peut être utilisé comme point de départ visuel, cependant, le tissu doit répondre à toutes les exigences visant les couleurs numériques coordonnées et la réflectance dans l'infrarouge prescrites à l'annexe I.

3.6 Fini.

3.6.1 Type I Sauf indication contraire dans l'appel d'offres, le fini doit être conforme aux indications du modèle réglementaire DSSPM 268-07. Le tissu fini doit être conforme aux exigences prescrites au tableau I.

3.6.2 Type II Le tissu de type I répondant à toutes les exigences prescrites au tableau I doit être légèrement enduit de polyuréthane et recevoir un traitement déperlant durable sur le côté nylon conformément aux exigences du tableau II. Le fini doit être conforme aux indications du modèle réglementaire DSSPM 271-07.

3.6.2.1 L'enduit doit être du polyuréthane transparent, appliqué sur l'envers seulement du tissu de base.

3.7 Longueur. Sauf indication contraire dans les documents contractuels, le tissu doit être livré en longueurs d'environ 100 m avec au plus deux longueurs par pièce, dont la plus courte ne doit pas être inférieure à 20 m.

3.8 Marquage des pièces. Chaque pièce de tissu doit porter, à une extrémité, une étiquette fixée à la lisière. L'étiquette doit être en toile de lin, en oléfine thermoliée ou en carton fort et percée d'un œillet renforcé permettant d'attacher une ficelle; elle doit porter les indications suivantes en caractères lisibles :

- a) Contractor's identification
- b) Gross length in meters (including allowance)
- c) Net length in meters
- d) Piece number
- e) Number of lengths per piece
- f) Nomenclature
- g) Colour
- h) Specification number
- i) Month and year of contract
- j) Nato Stock Number

- a) Identification de l'entrepreneur
- b) Longueur brute en mètres (y compris la réserve)
- c) Longueur nette en mètres
- d) Numéro du rouleau
- e) Nombre de longueurs par rouleau
- f) Nomenclature
- g) Couleur
- h) Numéro de la spécification
- i) Mois et année du contrat
- j) Numéros de nomenclature OTAN

4. QUALITY CONTROL/INSPECTION

4.1 Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure material and services conform to prescribed requirements. The contractor is responsible for ensuring that all material or services submitted to the Government for acceptance comply with all requirements of the contract.

4. CONTRÔLE DE LA QUALITÉ / INSPECTION

4.1 Sauf indication contraire dans le contrat ou les documents d'achat, l'entrepreneur est tenu d'effectuer les inspections mentionnées dans la présente spécification. Il peut utiliser à cette fin son propre matériel d'inspection ou celui de tout autre établissement acceptable au gouvernement du Canada ou à son représentant. Le gouvernement se réserve le droit d'effectuer les inspections mentionnées dans la présente spécification, lorsqu'elles sont nécessaires pour garantir que le matériel et les services sont conformes aux exigences prescrites. L'entrepreneur doit s'assurer que le matériel et les services proposés au gouvernement sont conformes aux exigences du contrat.

5. PACKAGING

5.1 Packaging and Packing. Packaging, packing, delivery and marking of shipping containers shall be in accordance with the terms of the contract.

5. CONDITIONNEMENT

5.1 Conditionnement et emballage. Le conditionnement, l'emballage, la livraison et le marquage des contenants d'expédition doivent être conformes aux modalités du contrat.

6. NOTES

6.1 Ordering Data. Procurement documents should specify the following:

- a) Title, number and date of this specification
- b) Colour required (see 3.5)
- c) Packaging and marking of shipping containers (see 5.1)
- d) The Design Authority

6. REMARQUES

6.1 Données de commande. Les documents d'achat doivent préciser :

- a) Le titre, le numéro et la date de la présente spécification
- b) La couleur requise (voir 3.5)
- c) Conditionnement et marquage des contenants d'expédition (voir 5.1)
- d) L'autorité responsable de la conception

6.2 Design Authority. The Design Authority is the Government agency responsible for technical aspects of design and changes to design. The Design Authority, for the items covered by this specification, is the Directorate of Soldier Systems Program Management (DSSPM).

6.3 Quality Assurance Authority. The Quality Assurance Authority is the Government agency responsible for providing assurance that material and services supplied by the contractor conform to specified requirements. The Quality Assurance Authority is the Director Quality Assurance.

6.4 Definition of Terms.

6.4.1 Master Sealed Pattern. A Master Sealed Pattern is the authorized prototype of the item to be produced and is held only by the Government.

6.4.2 Sealed Pattern. A Sealed Pattern is a duplicate of the Master Sealed Pattern and is available to the manufacturer to be used as a guide in production.

6.5 The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

6.2 Autorité responsable de la conception. Autorité gouvernementale responsable des aspects techniques de la conception et des modifications connexes. L'autorité responsable de la conception, pour les articles visés par la présente spécification, est la Direction de l'administration du programme de l'équipement du soldat (DAPES).

6.3 Autorité responsable de l'assurance de la qualité. Organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur respectent les exigences prescrites. L'autorité responsable de l'assurance de la qualité est le directeur de l'assurance de la qualité.

6.4 Définition des termes.

6.4.1 Modèle réglementaire principal. Prototype autorisé de l'article qui doit être fabriqué et dont le gouvernement est le seul détenteur.

6.4.2 Modèle réglementaire. Copie exacte du modèle réglementaire principal mis à la disposition du fabricant qui doit l'utiliser comme un guide.

6.5 La fabrication ou l'évaluation d'un produit conformément à la présente spécification pourrait nécessiter l'utilisation de matériaux ou d'équipement susceptibles d'être dangereux. La présente spécification n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement qui pourraient être associées à son utilisation. Il incombe à l'utilisateur de la spécification d'établir au préalable des méthodes appropriées qui tiennent compte des questions d'environnement, de santé et de sécurité, et de déterminer les restrictions réglementaires applicables.

Table I: Requirements for the Finished Fabric - Type I

Property	Test Method	Specified Requirement	Minimum Acceptable	Maximum Acceptable
Weave		Plain, 2x2 basket weave, 2 ends as 1, 2 picks as 1 (see Note 1)		
Width	4.1*	152 cm	148 cm	156 cm
Fabric Count (yarns per cm) (see Note 2)	6*	Warp: 42 Weft: 32	Warp: 40 Weft: 31	
Mass	5.1*	195 g/m ²	190 g/m ²	203 g/m ²
Breaking Strength	9.2* (Test 6.1)	Warp: 1020N Weft: 775 N	Warp: 935 N Weft: 710 N	
Dimensional change in laundering (after 5 washes)	24* or 58* (III.E.3)			Warp: 3.0% Weft: 3.0%
Water repellency – Spray as received after washing (2 cycles) after drycleaning (2 cycles)	26.2* 24* or 58* (III.E.3) 29.1*		All Conditions: 100	
Non-Fibrous Materials	15* (see Note 3)			2% total
Colourfastness to Croaking	22* (Tests 6.1 & 6.2)	No change in colour and no staining: Grey Scale 5		No appreciable change in colour and no appreciable staining: Grey Scale 4
Colourfastness to Dry Cleaning	29.1*	No change in colour and no staining of the attached white fabric: Grey Scale 5		No appreciable change in colour or staining of the attached white fabric: Grey Scale 4
Colourfastness to Light	16** Option E		Sample Grey Scale 4 after 40 AATCC Fading Units	

* CAN/CGSB-4.2 Textile Test Methods

** AATCC Textile Test Methods

Note 1: The warp and weft may be the same provided that all properties of the specification are met with the exception of the count. If 420 denier nylon yarn is used in the weft, the weave of the fabric shall be

plain 2 ends as 2 with single filling, and the weft yarns per centimetre specified in Table I shall be reduced by 50 per cent. All other requirements of the specification shall be met.

Note 2: Deviations to the specified fabric count will be permitted provided that all other requirements of this specification are met.

Note 3: CAN/CGSB-4.2 Method 15 paragraph 7.4, solvent extraction, one of petroleum ether, tetrachloroethylene or hexane shall be used. Also, omit para 7.7 and 7.8.

Tableau I : Exigences en matière d'essais du tissu fini – Type I

Propriété	Méthode d'essai	Exigence prescrite	Minimum acceptable	Maximum acceptable
Armure		Armure unie, nattée, 2 x 2, 2 fils de chaîne pour 1 fil de trame, 2 fils de trame pour 1 de chaîne (Voir la note 1)		
Largeur	4.1*	152 cm	148 cm	156 cm
Contexture (fils par cm) (voir la note 2)	6*	Chaîne: 42 Trame: 32	Chaîne: 40 Trame: 31	
Masse	5.1*	195 g/m ²	190 g/m ²	203 g/m ²
Résistance à la rupture	9.2* (Essai 6.1)	Chaîne: 1020 N Trame: 775 N	Chaîne: 935 N Trame: 710 N	
Stabilité dimensionnelle au blanchissage (après 5 lavages)	24* ou 58* (III.E.3)			Chaîne: 3,0 % Trame: 3,0 %
Déperlance – Essai d'arrosage À la réception Après lavage (2 cycles) Après nettoyage à sec (2 cycles)	 26.2* 24* ou 58* (III.E.3) 29.1*		Toutes les conditions: 100	
Tissus non fibreux	15* (Voir la note 3)			2 % en tout
Solidité de la couleur au frottement (dégorgement)	22* (Essais 6.1 et 6.2)	Pas de changement de couleur ni de tachage: Échelle de gris 5		Pas de changement de couleur ni de tachage appréciable: Échelle de gris 4
Solidité de la couleur au nettoyage à sec	29.1*	Pas de changement de couleur ni de tachage: du tissu blanc fixé Échelle de gris 5		Pas de changement de couleur ni de tachage appréciable du tissu blanc fixé: Échelle de gris 4

Propriété	Méthode d'essai	Exigence prescrite	Minimum acceptable	Maximum acceptable
Solidité des teintures à la lumière	16** Option E		Spécimen Échelle de gris 4 après 40 unités d'estompage de l'AATCC	

* CAN/CGSB-4.2 Méthodes pour épreuves textiles

** AATCC Textile Test Methods

Note 1: La chaîne et la trame peuvent être identiques, pourvu que toutes les propriétés de la spécification soient respectées, exception faite de la contexture. Si on utilise un fil de nylon 420 deniers pour la trame, l'armure du tissu doit être une armure unie 2/2, 2 fils de chaîne pour 2 fils de trame. Le nombre de fils de trame par centimètre prescrit au tableau I doit être réduit de 50 %. Toutes les autres exigences de la spécification doivent être satisfaites.

Note 2: Des écarts de la contexture prescrite seront autorisés, pourvu que toutes les autres exigences de la présente spécification soient respectées.

Note 3: CAN/CGSB-4.2 Méthode 15, paragraphe 7.4, Élimination de matières non fibreuses par solvant. Un éther de pétrole, le tétrachloroéthylène ou l'hexane, doit être utilisé. Omettre les paragraphes 7.7 et 7.8.

Table II: Testing Requirements for the Finished Fabric - Type II, Polyurethane Coated

Property	Test Method	Specified Requirement	Minimum Acceptable	Maximum Acceptable
Total mass	5.1*	230 g/m ²	220 g/m ²	240 g/m ²
Mass of coating	5.1*	33 g/m ²	27 g/m ²	39 g/m ²
Tensile strength	9.2*		Warp: 1400 N Weft: 1400 N	
Tear strength	12.1*		Warp: 90 N Weft: 90 N	
Dimensional change in laundering (after 2 washes)	24* or 58* (III.E.3)	Warp: 2% Weft: 2%		Warp: 3% Weft: 3%
Water repellency – Spray	26.2*		100	
Hydrostatic resistance	26.5*	690 kPa	550 kPa	
Resistance to micro-organisms	28.2*	No staining and no growth (0%)		20% staining 20% growth

* CAN/CGSB 4.2 - Textile Test Methods

Note: The base cloth shall meet the requirements of Table I prior to application of the coating.

Tableau II : Exigences en matière d'essais du tissu fini – type II, enduit de polyuréthane

Propriété	Méthode d'essai	Exigence prescrite	Minimum acceptable	Maximum acceptable
Masse totale	5.1*	230 g/m ²	220 g/m ²	240 g/m ²
Masse de l'enduit	5.1*	33 g/m ²	27 g/m ²	39 g/m ²
Résistance à la rupture	9.2*		Chaîne: 1400 N Trame: 1400 N	
Résistance à la déchirure	12.1*		Chaîne: 90 N Trame: 90 N	
Stabilité dimensionnelle au blanchissage (après 5 lavages)	24* ou 58* (III.E.3)	Chaîne: 2 % Trame: 2 %		Chaîne: 3 % Trame: 3 %
Déperlance – Essai d'arrosage	26.2*		100	
Essai de pénétration d'eau à haute pression	26.5*	690 kPa	550 kPa	
Résistance aux microorganismes	28.2*	Pas de tache ni de croissance (0 %)		20 % de tache 20 % de croissance

* CAN/CGSB-4.2 Méthodes pour épreuves textiles

Note: Le tissu de base doit satisfaire aux exigences du tableau I avant l'enduction.

APPENDIX I

REQUIREMENTS FOR CANADIAN AVERAGE GREEN FOR COLOUR AND INFRA-RED REFLECTION

1. Colour requirements and IRR requirements are found on the following pages.
2. All measurements are to be made in accordance with CIE publication 15.2 and ASTM E308-99 using CIE Illuminant C and a 2 degree observer, specular component included. Sample preparation for chromaticity and IRR measurements shall be in accordance with AATCC Instrumental Measurement Procedure #6, A1.3, non-opaque samples.
3. Tolerance is plus/minus 2 CIE LAB units for each co-ordinate ($L^*a^*b^*$).
4. Gloss values shall be less than 1 unit.
5. Infra-red values shall lie between the proscribed plus/minus standard deviation (SD) and are to be applied to the substrate as follows:

Canadian Average Green - as specified
(average reflectance)
6. The on-going Canadian requirement is for IRR values ranging from 400nm to 2000nm as shown in the following pages. Currently compliance is mandatory from 400nm to 1300nm. Every effort should be made to meet the required curves beyond 1300nm, however compliance is not mandatory at this time.

ANNEXE I

EXIGENCES RELATIVES À LA COULEUR ET À LA RÉFLECTANCE DANS L'INFRAROUGE POUR LE VERT CANADIEN MOYEN

1. Les exigences pour la couleur et la RIR sont présentées dans les pages suivantes.
2. Toutes les mesures doivent être effectuées conformément aux publications CIE 15.2 et ASTM E308.99 à l'aide de l'illuminant C et de l'observateur à 2° de la CIE, composante spéculaire incluse. La préparation des échantillons pour les mesures de couleur et de RIR doit être réalisée conformément à la procédure de mesure instrumentale n° 6 de l'American Association of Textile Chemists and Colorists (AATCC), A1.3, pour des échantillons non opaques.
3. La tolérance est de ± 2 unités CIE LAB pour chaque coordonnée (valeurs $L^*a^*b^*$).
4. Les valeurs de lustre doivent être inférieures à une (1) unité.
5. Les valeurs dans l'infrarouge doivent être comprises en deçà de l'écart type indiqué (\pm) et être appliquées au substrat comme suit:

Vert canadien moyen – selon ce qui est
indiqué (réflectance moyenne)
6. Selon les exigences canadiennes actuelles, on doit respecter les valeurs RIR entre 400 et 2 000 nm, comme il est indiqué dans les pages suivantes. Actuellement, la plage obligatoire va de 400 à 1 300 nm. On ne devrait ménager aucun effort pour respecter les courbes requises au-delà de 1 300 nm; toutefois, cette exigence n'est pas obligatoire pour le moment.

Colour Requirements: Canadian Average Green (single colour fabric)

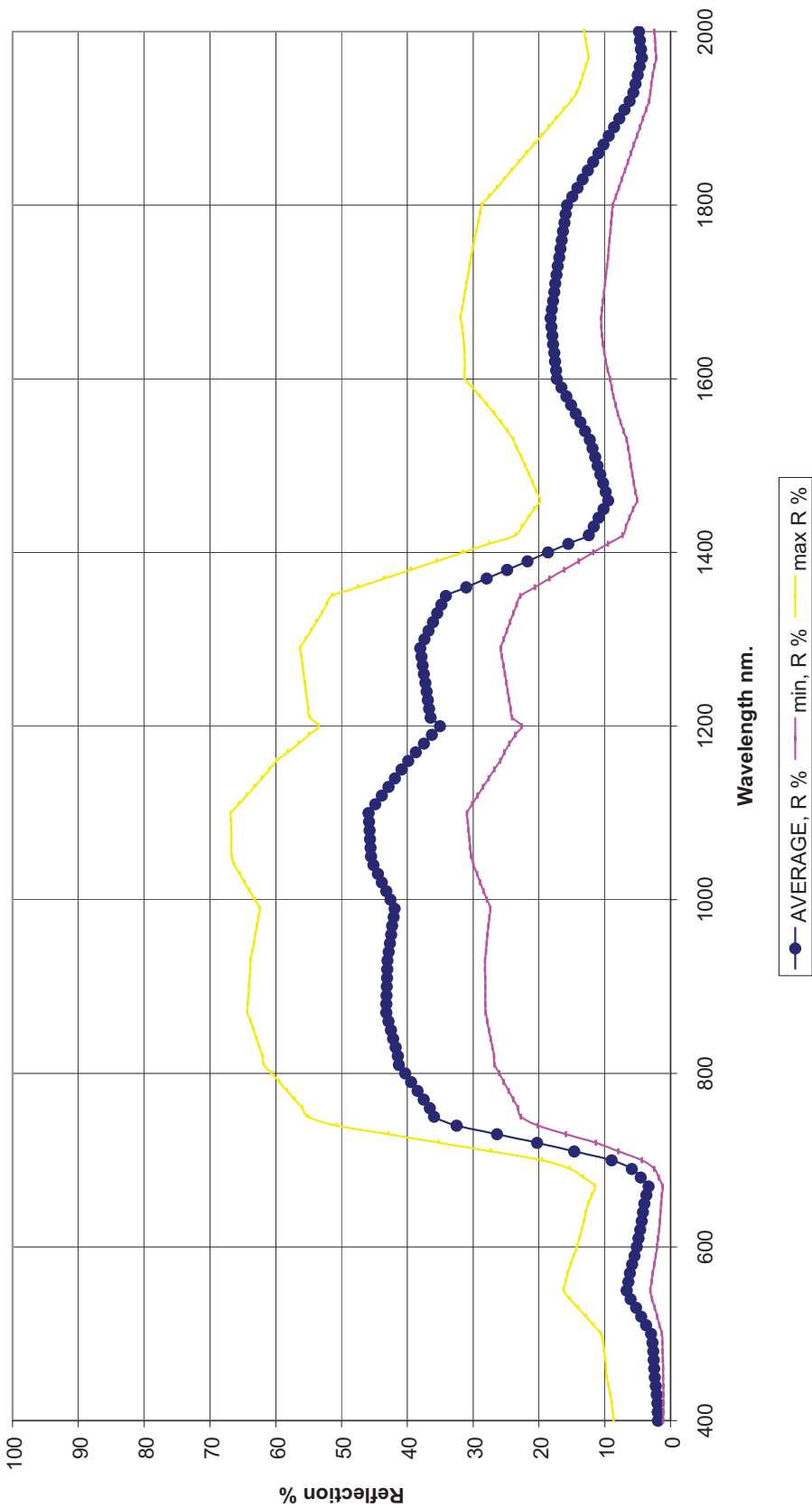
SPECIFICATIONS:		x	0.348 - 0.372
CIE 1931/CIE LAB 1976		y	0.374 - 0.386
ILLUMINANT C, 2 deg.		Y%	7.00 maximum
Specular component included		DW nm	569.36
		S%	38.50
		L*	27.41
		a*	-6.78
		b*	16.46

Wavelength nm	Reflection %	ST.DEV. %	Refl. Min %	Refl. Max %		Wavelength nm	Reflection %	ST.DEV. %	Refl. Min %	Refl. Max %
400	1.89	0.77	1.12	8.67		840	42.14	14.80	27.35	62.94
410	1.95	0.85	1.10	8.79		850	42.50	14.90	27.60	63.39
420	2.00	0.93	1.07	8.93		860	42.85	15.00	27.85	63.85
430	2.11	1.04	1.07	9.16		870	43.20	15.11	28.09	64.31
440	2.26	1.17	1.09	9.43		880	43.20	15.05	28.15	64.24
450	2.39	1.28	1.11	9.67		890	43.16	14.99	28.16	64.15
460	2.46	1.33	1.14	9.79		900	43.11	14.94	28.17	64.06
470	2.53	1.37	1.16	9.90		910	43.07	14.90	28.17	63.97
480	2.62	1.43	1.19	10.10		920	43.03	14.86	28.18	63.89
490	2.72	1.50	1.22	10.22		930	43.00	14.82	28.18	63.82
500	2.95	1.63	1.32	10.58		940	42.82	14.76	28.06	63.58
510	3.70	2.02	1.68	11.72		950	42.74	14.70	27.94	63.33
520	4.45	2.44	2.01	12.88		960	42.45	14.64	27.81	63.09
530	5.24	2.84	2.40	14.09		970	42.28	14.60	27.68	62.87
540	6.05	3.26	2.79	15.31		980	42.09	14.56	27.53	62.64
550	6.65	3.59	3.06	16.24		990	41.91	14.52	27.39	62.44
560	6.41	3.53	2.88	15.94		1000	42.56	14.65	27.91	63.20
570	6.17	3.49	2.68	15.65		1010	43.21	14.77	28.43	63.98
580	5.84	3.36	2.48	15.20		1020	43.85	14.90	28.95	64.76
590	5.47	3.22	2.26	14.69		1030	44.45	15.04	29.41	65.49
600	5.14	3.08	2.05	14.22		1040	45.15	15.18	29.97	66.33
610	4.86	2.97	1.89	13.84		1050	45.51	15.22	30.30	66.73
620	4.60	2.88	1.72	13.48		1060	45.59	15.15	30.43	66.74
630	4.39	2.78	1.61	13.16		1070	45.66	15.09	30.56	66.75
640	4.19	2.67	1.52	12.87		1080	45.73	15.04	30.69	66.76
650	3.96	2.54	1.42	12.50		1090	45.81	14.99	30.82	66.79
660	3.65	2.33	1.32	11.98		1100	45.88	14.94	30.94	66.81
670	3.34	2.13	1.21	11.47		1110	44.88	14.74	30.14	65.61
680	4.52	2.71	1.81	13.23		1120	43.87	14.55	29.32	64.42
690	5.87	3.42	2.45	15.30		1130	42.87	14.39	28.48	63.25
700	8.94	4.34	4.34	19.54		1140	41.87	14.24	27.63	62.10
710	14.61	6.69	7.92	27.30		1150	40.86	14.11	26.76	60.97
720	20.27	8.94	11.33	35.21		1160	39.87	14.00	25.87	59.86
730	26.37	10.48	15.89	42.86		1170	38.72	13.46	25.26	58.18
740	32.48	12.31	20.17	50.78		1180	37.49	13.01	24.49	56.50
750	35.95	13.20	22.75	55.15		1190	36.27	12.66	23.61	54.93
760	36.58	13.40	23.18	55.99		1200	35.04	12.43	22.61	53.47
770	37.52	13.62	23.91	57.14		1210	36.48	12.40	24.08	54.88
780	38.46	13.84	24.62	58.29		1220	36.68	12.37	24.31	55.05
790	39.40	14.06	25.34	59.46		1230	36.87	12.35	24.53	55.22
800	40.33	14.29	26.04	60.62		1240	37.07	12.33	24.75	55.40
810	41.28	14.53	26.75	61.81		1250	37.26	12.30	24.96	55.57
820	41.44	14.60	26.83	62.04		1260	37.46	12.28	25.18	55.75
830	41.79	14.70	27.09	62.49		1270	37.65	12.27	25.39	55.92

This document does not contain controlled goods. / Cette documentation ne contient pas de marchandises contrôlées.

Wavelength nm	Reflection %	ST.DEV. %	Refi. Min %	Refi. Max %		Wavelength nm	Reflection %	ST.DEV. %	Refi. Min %	Refi. Max %
1280	37.85	12.25	25.60	56.10		1720	17.30	7.49	9.81	30.79
1290	38.05	12.24	25.81	56.28		1730	17.11	7.45	9.66	30.56
1300	37.40	12.05	25.36	55.45		1740	16.92	7.42	9.50	30.34
1310	36.75	11.87	24.88	54.62		1750	16.72	7.34	9.38	30.07
1320	36.10	11.71	24.39	53.81		1760	16.52	7.26	9.26	29.79
1330	35.45	11.57	23.88	53.01		1770	16.33	7.18	9.14	29.51
1340	34.80	11.44	23.36	52.23		1780	16.12	7.11	9.02	29.23
1350	34.15	11.32	22.83	51.47		1790	15.92	7.03	8.89	28.96
1360	31.04	10.44	20.61	47.48		1800	15.72	6.96	8.76	28.68
1370	27.94	9.55	18.39	43.49		1810	14.93	6.63	8.30	27.55
1380	24.83	8.66	16.17	39.50		1820	14.13	6.29	7.85	26.42
1390	21.73	7.78	13.95	35.50		1830	13.34	5.95	7.39	25.29
1400	18.62	6.89	11.73	31.51		1840	12.55	5.62	6.93	24.16
1410	15.52	6.00	9.51	27.52		1850	11.75	5.28	6.47	23.03
1420	12.41	5.12	7.29	23.53		1860	10.96	4.94	6.01	21.90
1430	11.67	4.90	6.76	22.57		1870	10.16	4.61	5.56	20.77
1440	10.93	4.70	6.23	21.63		1880	9.37	4.27	5.10	19.64
1450	10.19	4.52	5.67	20.71		1890	8.57	3.94	4.64	18.51
1460	9.46	4.35	5.10	19.81		1900	7.78	3.60	4.18	17.38
1470	9.85	4.52	5.33	20.37		1910	6.99	3.26	3.72	16.25
1480	10.26	4.69	5.56	20.95		1920	6.19	2.93	3.26	15.12
1490	10.66	4.87	5.79	21.53		1930	5.65	2.58	3.07	14.23
1500	11.06	5.05	6.01	22.11		1940	5.32	2.41	2.91	13.73
1510	11.46	5.24	6.22	22.70		1950	4.99	2.28	2.71	13.26
1520	11.86	5.42	6.44	23.39		1960	4.67	2.19	2.48	12.86
1530	12.27	5.61	6.66	23.88		1970	4.33	2.16	2.18	12.49
1540	12.98	5.83	7.16	24.81		1980	4.48	2.21	2.27	12.69
1550	13.69	6.10	7.59	25.79		1990	4.63	2.27	2.36	12.90
1560	14.41	6.42	7.99	26.82		2000	4.79	2.33	2.46	13.12
1570	15.12	6.78	8.34	27.89						
1580	15.83	7.17	8.66	29.00						
1590	16.55	7.60	8.95	30.15						
1600	17.26	8.05	9.21	31.31						
1610	17.40	7.86	9.54	31.26						
1620	17.54	7.72	9.82	31.25						
1630	17.67	7.61	10.06	31.29						
1640	17.82	7.56	10.26	31.38						
1650	17.96	7.55	10.40	31.51						
1660	18.09	7.59	10.49	31.68						
1670	18.23	7.68	10.55	31.92						
1680	18.04	7.64	10.40	31.69						
1690	17.85	7.60	10.25	31.45						
1700	17.67	7.56	10.11	31.23						
1710	17.49	7.52	9.96	31.01						

COLOUR AVERAGE GREEN



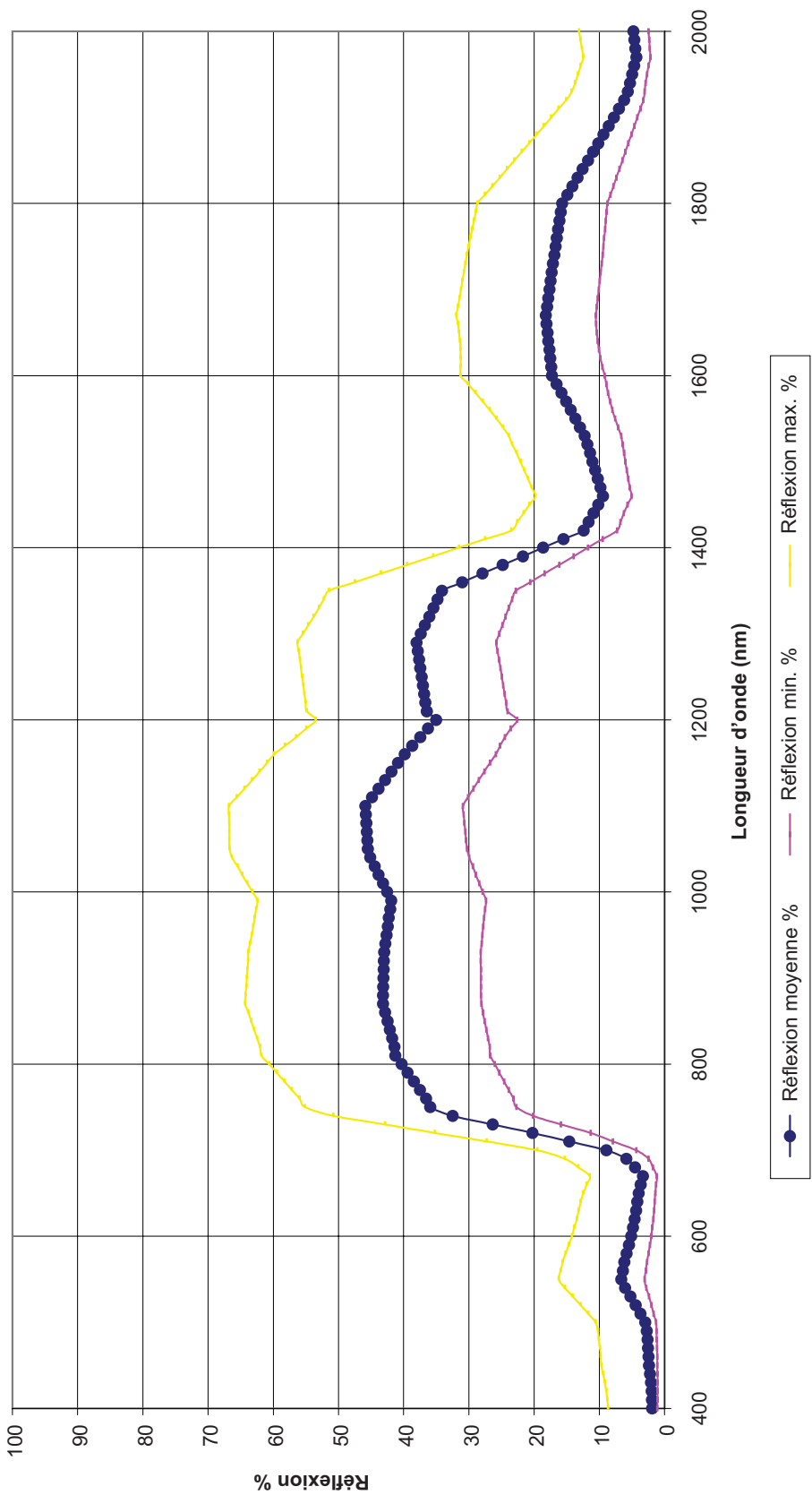
Exigences relatives aux couleurs : Vert canadien moyen (tissu de même couleur)

SPÉCIFICATIONS:		x	0,348 – 0,372
CIE 1931/CIE LAB 1976		y	0,374 – 0,386
ILLUMINANT C. 2°		Y%	7,00 maximum
Composante spéculaire incluse		DW nm	569,36
		S%	38,50
		L*	27,41
		a*	-6,78
		b*	16,46

Longueur d'onde nm	Réflexion %	Écart type %	Réfl. min %	Réfl. max. %	Longueur d'onde nm	Réflexion %	Écart type %	Réfl. min %	Réfl. max. %
400	1,89	0,77	1,12	8,67	840	42,14	14,80	27,35	62,94
410	1,95	0,85	1,10	8,79	850	42,50	14,90	27,60	63,39
420	2,00	0,93	1,07	8,93	860	42,85	15,00	27,85	63,85
430	2,11	1,04	1,07	9,16	870	43,20	15,11	28,09	64,31
440	2,26	1,17	1,09	9,43	880	43,20	15,05	28,15	64,24
450	2,39	1,28	1,11	9,67	890	43,16	14,99	28,16	64,15
460	2,46	1,33	1,14	9,79	900	43,11	14,94	28,17	64,06
470	2,53	1,37	1,16	9,90	910	43,07	14,90	28,17	63,97
480	2,62	1,43	1,19	10,10	920	43,03	14,86	28,18	63,89
490	2,72	1,50	1,22	10,22	930	43,00	14,82	28,18	63,82
500	2,95	1,63	1,32	10,58	940	42,82	14,76	28,06	63,58
510	3,70	2,02	1,68	11,72	950	42,64	14,70	27,94	63,33
520	4,45	2,44	2,01	12,88	960	42,45	14,64	27,81	63,09
530	5,24	2,84	2,40	14,09	970	42,28	14,60	27,68	62,87
540	6,05	3,26	2,79	15,31	980	42,09	14,56	27,53	62,64
550	6,65	3,59	3,06	16,24	990	41,91	14,52	27,39	62,44
560	6,41	3,53	2,88	15,94	1000	42,56	14,65	27,91	63,20
570	6,17	3,49	2,68	15,65	1010	43,21	14,77	28,43	63,98
580	5,84	3,36	2,48	15,20	1020	43,85	14,90	28,95	64,76
590	5,47	3,22	2,26	14,69	1030	44,45	15,04	29,41	65,49
600	5,14	3,08	2,05	14,22	1040	45,15	15,18	29,97	66,33
610	4,86	2,97	1,89	13,84	1050	45,51	15,22	30,30	66,73
620	4,60	2,88	1,72	13,48	1060	45,59	15,15	30,43	66,74
630	4,39	2,78	1,61	13,16	1070	45,66	15,09	30,56	66,75
640	4,19	2,67	1,52	12,87	1080	45,73	15,04	30,69	66,76
650	3,96	2,54	1,42	12,50	1090	45,81	14,99	30,82	66,79
660	3,65	2,33	1,32	11,98	1100	45,88	14,94	30,94	66,81
670	3,34	2,13	1,21	11,47	1110	44,88	14,74	30,14	65,61
680	4,52	2,71	1,81	13,23	1120	43,87	14,55	29,32	64,42
690	5,87	3,42	2,45	15,30	1130	42,87	14,39	28,48	63,25
700	8,94	4,60	4,34	19,54	1140	41,87	14,24	27,63	62,10
710	14,61	6,69	7,92	27,30	1150	40,86	14,11	26,76	60,97
720	20,27	8,94	11,33	35,21	1160	39,87	14,00	25,87	59,86
730	26,37	10,48	15,89	42,86	1170	38,72	13,46	25,26	58,18
740	32,48	12,31	20,17	50,78	1180	37,49	13,01	24,49	56,50
750	35,95	13,20	22,75	55,15	1190	36,27	12,66	23,61	54,93
760	36,58	13,40	23,18	55,99	1200	35,04	12,43	22,61	53,47
770	37,52	13,62	23,91	57,14	1210	36,48	12,40	24,08	54,88
780	38,46	13,84	24,62	58,29	1220	36,68	12,37	24,31	55,05
790	39,40	14,06	25,34	59,46	1230	36,87	12,35	24,53	55,22
800	40,33	14,29	26,04	60,62	1240	37,07	12,33	24,75	55,40
810	41,28	14,53	26,75	61,81	1250	37,26	12,30	24,96	55,57
820	41,44	14,60	26,83	62,04	1260	37,46	12,28	25,18	55,75
830	41,79	14,70	27,09	62,49	1270	37,65	12,27	25,39	55,92

Longueur d'onde nm	Réflexion %	Écart type %	Réfl. min %	Réfl. max. %		Longueur d'onde nm	Réflexion %	Écart type %	Réfl. min %	Réfl. max. %
1280	37,85	12,25	25,60	56,10		1720	17,30	7,49	9,81	30,79
1290	38,05	12,24	25,81	56,28		1730	17,11	7,45	9,66	30,56
1300	37,40	12,05	25,36	55,45		1740	16,92	7,42	9,50	30,34
1310	36,75	11,87	24,88	54,62		1750	16,72	7,34	9,38	30,07
1320	36,10	11,71	24,39	53,81		1760	16,52	7,26	9,26	29,79
1330	35,45	11,57	23,88	53,01		1770	16,33	7,18	9,14	29,51
1340	34,80	11,44	23,36	52,23		1780	16,12	7,11	9,02	29,23
1350	34,15	11,32	22,83	51,47		1790	15,92	7,03	8,89	28,96
1360	31,04	10,44	20,61	47,48		1800	15,72	6,96	8,76	28,68
1370	27,94	9,55	18,39	43,49		1810	14,93	6,63	8,30	27,55
1380	24,83	8,66	16,17	39,50		1820	14,13	6,29	7,85	26,42
1390	21,73	7,78	13,95	35,50		1830	13,34	5,95	7,39	25,29
1400	18,62	6,89	11,73	31,51		1840	12,55	5,62	6,93	24,16
1410	15,52	6,00	9,51	27,52		1850	11,75	5,28	6,47	23,03
1420	12,41	5,12	7,29	23,53		1860	10,96	4,94	6,01	21,90
1430	11,67	4,90	6,76	22,57		1870	10,16	4,61	5,56	20,77
1440	10,93	4,70	6,23	21,63		1880	9,37	4,27	5,10	19,64
1450	10,19	4,52	5,67	20,71		1890	8,57	3,94	4,64	18,51
1460	9,46	4,35	5,10	19,81		1900	7,78	3,60	4,18	17,38
1470	9,85	4,52	5,33	20,37		1910	6,99	3,26	3,72	16,25
1480	10,26	4,69	5,56	20,95		1920	6,19	2,93	3,26	15,12
1490	10,66	4,87	5,79	21,53		1930	5,65	2,58	3,07	14,23
1500	11,06	5,05	6,01	22,11		1940	5,32	2,41	2,91	13,73
1510	11,46	5,24	6,22	22,70		1950	4,99	2,28	2,71	13,26
1520	11,86	5,42	6,44	23,39		1960	4,67	2,19	2,48	12,86
1530	12,27	5,61	6,66	23,88		1970	4,33	2,16	2,18	12,49
1540	12,98	5,83	7,16	24,81		1980	4,48	2,21	2,27	12,69
1550	13,69	6,10	7,59	25,79		1990	4,63	2,27	2,36	12,90
1560	14,41	6,42	7,99	26,82		2000	4,79	2,33	2,46	13,12
1570	15,12	6,78	8,34	27,89						
1580	15,83	7,17	8,66	29,00						
1590	16,55	7,60	8,95	30,15						
1600	17,26	8,05	9,21	31,31						
1610	17,40	7,86	9,54	31,26						
1620	17,54	7,72	9,82	31,25						
1630	17,67	7,61	10,06	31,29						
1640	17,82	7,56	10,26	31,38						
1650	17,96	7,55	10,40	31,51						
1660	18,09	7,59	10,49	31,68						
1670	18,23	7,68	10,55	31,92						
1680	18,04	7,64	10,40	31,69						
1690	17,85	7,60	10,25	31,45						
1700	17,67	7,56	10,11	31,23						
1710	17,49	7,52	9,96	31,01						

COULEUR: VERT MOYEN



NOTICE



This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

SPECIFICATION

CLOTH, MELTON, WOOL, 375 gm²

1. SCOPE

1.1 Scope. This specification covers the requirements for Cloth, Melton, Wool, 375 g/m².

2. APPLICABLE DOCUMENTS

2.1 Government Documents. Not applicable.

2.2 Other Publications. The following publications form part of this specification to the extent specified herein. The effective date of the publications shall be those in effect on the date of the publication of this specification. Sources are as shown.

CAN/CGSB-4.2 Textile Test Methods

Canadian General Standards Board

Gatineau, QC

K1A 1G6

Telephone: 819-956-0425 or 1-800-665-2472

Email: ncr.cgsb-ongc@pwgsc.gc.ca

Website: <http://www.pwgsc.gc.ca/cgsb/home/index-e.html>

AATCC Textile Test Methods

American Association of Textile Chemists and Colorists

P.O. Box 12215

Research Triangle Park, NC

27709, USA

Telephone: 919-549-3526

Website: www.aatcc.org

SPECIFICATION

TISSU DE LAINE MELTON, 375 g/m²

1. PORTÉE

1.1 Portée. La présente spécification vise les exigences pour le tissu de laine melton, 375 g/m².

2. DOCUMENTS APPLICABLES

2.1 Documents du gouvernement. Sans objet.

2.2 Autres publications. Les publications suivantes font partie intégrante de la présente spécification selon les modalités indiquées ci-après. La date d'entrée en vigueur doit être celle en vigueur à la date de publication de la présente spécification. La source de diffusion est celle indiquée.

CAN/CGSB-4.2 Méthodes pour épreuves textiles

Office des normes générales du Canada

Gatineau (Québec)

K1A 1G6

Téléphone : 819-956-0425 ou 1-800-665-2472

Courriel : ncr.cgsb-ongc@pwgsc.gc.ca

Site Internet : <http://www.tpsgc-pwgsc.gc.ca/cgsb/home/index-f.html>

AATCC Textile Test Methods

American Association of Textile Chemists and Colorists

P.O. Box 12215

Research Triangle Park, NC

27709, États-Unis

Téléphone : 919-549-3526

Site internet : www.aatcc.org

2.3 Sealed Patterns.

DOS 1-1052
Cloth, Melton, Wool, 375 g/m², Black
NSN 8305-21-103-3627

DOS 1-3324
Cloth, Melton, Wool, 375 g/m², Dark Blue
NSN 8305-21-103-3633

DID 1-1692
Cloth, Melton, Wool, 375 g/m², White
NSN 8305-21-103-3661

DCGE 271-67
Cloth, Melton, Wool, 375g/m², Dark Green
NSN 8305-21-103-3658

DCGEM 271-75
Cloth, Melton, Wool, 375 g/m², Brown (for colour)
NSN 8305-21-870-8075

DCGEM 260-85
Cloth, Melton, Wool, 375 g/m², Air Force Blue
NSN 8305-21-898-3287 (to govern finish for all)

DCGEM 272-88
Cloth, Melton, Wool, 375 g/m², Scarlet
NSN 8305-21-905-6393

DACME 291-93
Cloth, Melton, Wool, 375 g/m²
NSN 8305-21-103-3661 (Sealed for maximum allowable contamination)

DSSPM 281-01
For Colour: Canadian Average Green (Cloth, Twist, nylon/cotton, 170g/m², Canadian Average Green)

2.4 Order of Precedence.

2.4.1 In the event of any inconsistency in contract documents such as contract, specification and sealed pattern, the order of precedence shall be contract, specification, and sealed pattern.

2.4.2 In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

2.3 Modèles réglementaires.

DOS 1-1052
Tissu de laine melton, 375 g/m², noir
NNO 8305-21-103-3627

DOS 1-3324
Tissu de laine melton, 375 g/m², bleu foncé
NNO 8305-21-103-3633

DID 1-1692
Tissu de laine melton, 375 g/m², blanc
NNO 8305-21-103-3661

DCGE 271-67
Tissu de laine melton, 375 g/m², vert foncé
NNO 8305-21-103-3658

DCGEM 271-75
Tissu de laine melton, 375 g/m², brun (pour la couleur)
NNO 8305-21-870-8075

DCGEM 260-85
Tissu de laine melton, 375 g/m², bleu force aérienne
NNO 8305-21-898-3287 (vise tous les apprêts)

DCGEM 272-88
Tissu de laine melton, 375 g/m², écarlate
NNO 8305-21-905-6393

DACME 291-93
Tissu de laine melton, 375 g/m²
NNO 8305-21-103-3661 (approuvés pour les contaminations maximales admises)

DSSPM 281-01
Pour la couleur: Vert canadien moyen (Tissu, torsion, nylon/coton, 170g/m², vert canadien moyen)

2.4 Ordre de préséance.

2.4.1 En cas d'incohérence entre les documents contractuels, soit le contrat, la spécification et les échantillons réglementaires, l'ordre de préséance est le suivant: le contrat, la spécification et les échantillons réglementaires.

2.4.2 En cas de divergence entre les documents mentionnés aux présentes et le contenu de la présente spécification, cette dernière a préséance.

2.4.3 In the event of inconsistency within this specification, including inconsistency in languages, the Design Authority (DSSPM 2-11) shall be contacted for clarification.

2.4.3 En cas d'incohérence dans l'énoncé de la spécification, incluant l'incohérence entre les langues, il faut communiquer avec l'autorité responsable de la conception (DAPES 2-11) pour obtenir des précisions.

3. REQUIREMENTS

3.1 Workmanship. The cloth covered by this specification shall be free of imperfections or blemishes such as may adversely affect its appearance or serviceability. For inspection purposes, imperfections and blemishes shall be considered defects when clearly visible at a normal inspection distance of approximately 1 metre under good, preferably North Light, lighting conditions.

3.2 Sealed Pattern. A Sealed Pattern, when available, will be supplied to the successful bidder. Sealed Patterns shall constitute the standard only in regard to any properties not defined in this specification. Note, however, that the order of precedence prevails (para 2.4). Sealed Patterns must be returned to the Crown and under no circumstances shall be mutilated or cut.

3.3 Yarns. Yarns shall be singles, woollen spun yarns of a blend containing not less than 88 per cent wool of 60/64s (Bradford) quality and not more than 12 per cent virgin nylon staple.

3.4 Cloth. The fabric shall be a Broken Twill Weave. When tested in accordance with the applicable test methods of CAN/CGSB-4.2, the finished cloth shall comply with the requirements specified in Table I.

3.5 Colour. Colour shall be as specified in the procurement documents. The colour required shall match the applicable sealed pattern or numerical colour co-ordinates, whichever is specified. All visual colour matching to sealed patterns shall be done in accordance with CAN/CGSB-4.2 No.41 Standard Light Sources for Colour Matching of Textiles. A colour match under north-sky daylight is the most important measurement. Metamerism shall be no greater than that exhibited by the Sealed Pattern.

3.6 Finish. The finish shall be as depicted by Sealed Pattern DCGEM 260-85.

3. EXIGENCES

3.1 Qualité d'exécution. Le tissu visé par la présente spécification doit être exempt de défauts pouvant nuire à son aspect ou à sa tenue en service. À des fins d'inspection, sont considérés comme défauts ceux qui sont clairement visibles à une distance d'inspection normale d'environ un mètre sous un bon éclairage, de préférence la lumière du nord.

3.2 Modèle réglementaire. Un modèle réglementaire, lorsque disponible, sera fourni au soumissionnaire retenu. Il doit constituer le modèle normalisé en ce qui a trait seulement à toute propriété non définie dans la présente spécification. Nota – L'ordre de préséance (paragraphe 2.4) doit être respecté. Les modèles réglementaires doivent être renvoyés au gouvernement et ne doivent en aucun cas être endommagés ni coupés.

3.3 Fils. Les fils doivent être des filés de laine cardée simples constitués d'au moins 88% de laine de qualité 60/64 (Bradford) et d'au plus 12% de fibres discontinues de nylon vierge.

3.4 Tissu. Le tissu doit comporter une armure sergé brisée. Lorsqu'il est mis à l'essai conformément aux méthodes pour épreuves textiles de la norme CAN/CGSB-4.2, le tissu fini doit être conforme aux exigences du tableau I.

3.5 Couleur. La couleur doit être celle précisée dans les documents d'achat. Elle doit correspondre au modèle réglementaire ou aux couleurs numériques coordonnées, selon le cas. L'appariement des couleurs visibles avec les modèles réglementaires doit être conforme aux exigences de la norme CAN/CGSB-4.2 n° 41, *Sources normalisées de lumière pour l'appariement des couleurs des textiles*. L'appariement des couleurs sous la lumière du nord est le principal critère. Le métamérisme ne doit pas dépasser celui du modèle réglementaire.

3.6 Fini. Le fini doit être conforme au modèle réglementaire (DCGEM 260-85).

3.7 Length. Unless otherwise specified, the cloth shall be delivered in pieces of approximately 70 metres with not more than two lengths per piece, the shorter of which shall be not less than 20 metres.

3.8 Piece Marking. Each piece of cloth shall have a label attached to the selvedge at one end. The label shall be made of linen, spunbonded olefin, or heavy cardboard with a reinforced eyelet for attaching a tying cord. The label shall be legibly printed with the following information:

- a) Contractor's identification
- b) Gross length in metres (including yardage allowance)
- c) Net metres
- d) Piece number
- e) Number of lengths per piece
- f) Nomenclature
- g) Specification number
- h) Month and year of contract
- i) NATO Stock Number

3.7 Longueur. Sauf indication contraire, le tissu doit être livré en pièces d'environ 70 mètres et comportant un maximum de deux longueurs par pièce. La longueur la plus courte de chaque pièce ne doit pas mesurer moins de 20 mètres.

3.8 Marquage des pièces. Chaque pièce doit porter, à une extrémité, une étiquette fixée à la lisière. L'étiquette doit être en toile de lin, en oléfine thermolée ou en carton fort et percée d'un œillet renforcé permettant d'attacher une ficelle; elle doit porter les indications suivantes en caractères lisibles :

- a) Nom de l'entrepreneur
- b) Longueur brute en mètres (y compris la tolérance)
- c) Longueur nette en mètres
- d) Numéro de la pièce
- e) Nombre de longueurs par pièce
- f) Nomenclature
- g) Numéro de la spécification
- h) Mois et année du contrat
- i) Numéro de nomenclature OTAN (NNO)

4. QUALITY CONTROL/INSPECTION

4.1 Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure material and services conform to prescribed requirements. The contractor is responsible for ensuring that all material or services submitted to the Government for acceptance comply with all requirements of the contract.

4. CONTRÔLE DE LA QUALITÉ / INSPECTION

4.1 Sauf indication contraire dans le contrat ou les documents d'achat, l'entrepreneur est tenu d'effectuer les inspections mentionnées dans la présente spécification. Il peut utiliser à cette fin son propre matériel d'inspection ou celui de tout autre établissement acceptable au gouvernement du Canada ou à son représentant. Le gouvernement se réserve le droit d'effectuer les inspections mentionnées dans la présente spécification, lorsqu'elles sont nécessaires pour assurer que le matériel et les services sont conformes aux exigences prescrites. L'entrepreneur doit s'assurer que le matériel et les services proposés au gouvernement sont conformes aux exigences du contrat.

5. PACKAGING

5.1 Packaging and Packing. Packaging, packing, delivery and marking of shipping containers shall be in accordance with the terms of the contract.

5. CONDITIONNEMENT

5.1 Conditionnement et emballage. Le conditionnement, l'emballage, la livraison et le marquage des contenants d'expédition doivent être conformes aux modalités du contrat.

6. NOTES

6.1 Ordering Data. Procurement documents should specify the following:

- a) Title, number and date of this specification
- b) Colour required (see 3.5)
- c) Packing and marking of shipping containers (see 5.1)
- d) The Design Authority
- e) The Quality Assurance Authority

6.2 Design Authority. The Design Authority is the Government agency responsible for technical aspects of design and changes to design. The Design Authority, for the items covered by this specification, is the Directorate of Soldier Systems Program Management (DSSPM).

6.3 Quality Assurance Authority. The Quality Assurance Authority is the Government agency responsible for providing assurance that material and services supplied by the contractor conform to specified requirements. The Quality Assurance Authority is the Director Quality Assurance.

6.4 Definition of Terms.

6.4.1 Master Sealed Pattern. A Master Sealed Pattern is the authorized prototype of the item to be produced and is held only by the Government.

6.4.2 Sealed Pattern. A Sealed Pattern is a duplicate of the Master Sealed Pattern and is available to the manufacturer to be used as a guide in production.

6.5 The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

6. NOTES

6.1 Données de commande. Les documents d'achat doivent préciser:

- a) Le titre, le numéro et la date de la présente spécification
- b) La couleur requise (voir 3.5)
- c) Les exigences relatives à l'emballage et au marquage des contenants d'expédition (voir 5.1)
- d) L'autorité responsable de la conception
- e) L'autorité responsable de l'assurance de la qualité

6.2 Autorité responsable de la conception. L'autorité responsable de la conception est l'organisme gouvernemental chargé des aspects techniques de la conception et des modifications connexes. Dans le cas de la présente spécification, il s'agit du directeur de l'Administration du programme de l'équipement du soldat (DAPES).

6.3 Autorité responsable de l'assurance de la qualité. L'autorité responsable de l'assurance de la qualité est l'organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur satisfont aux exigences prescrites. L'autorité responsable de l'assurance de la qualité est le directeur de l'assurance de la qualité.

6.4 Définitions.

6.4.1 Modèle réglementaire principal. Prototype autorisé de l'article qui doit être fabriqué et dont le gouvernement est le seul détenteur.

6.4.2 Modèle réglementaire. Copie exacte du modèle réglementaire principal mis à la disposition du fabricant qui doit l'utiliser comme un guide.

6.5 La fabrication d'un produit ou son évaluation conformément à la présente spécification peut nécessiter l'utilisation de matériel ou d'équipement dangereux. La présente spécification n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement liées à son utilisation. Il incombe à l'utilisateur de la présente spécification d'établir au préalable des méthodes appropriées qui tiennent compte des questions d'environnement, de santé et de sécurité, et de déterminer les restrictions réglementaires applicables.

Table I - Testing Requirements for Finished Cloth

Property	Test Method*	Specified Requirements	Minimum Acceptable	Maximum Acceptable
Width (between selvages)	4.1	150 cm	148 cm	152 cm
Mass	5.1	375 g/m ²	363 g/m ²	387 g/m ²
Fabric Count (yarns per cm)	6	Warp: 16 Weft: 14	Warp: 15 Weft: 13	
Breaking Strength	9.2 (Test 6.1)	Warp: 196 N Weft: 196 N	Warp: 178 N Weft: 178 N	
Dimensional Change in Wetting	25.1			Warp: 4.0 % Weft: 4.0 %
Non-Fibrous Materials	15 (See Note 1 below)			3.0%
Colourfastness to Dry Cleaning	29.1	No change in colour: Grey Scale 5		No appreciable change in colour: Grey Scale 4
Colourfastness to Crocking	22 (Tests 6.1 & 6.2)	Colour change and staining: Wet: Grey Scale 5 Dry: Grey Scale 5		Colour change and staining: Wet: Grey Scale 4 Dry: Grey Scale 4
Colourfastness to Water	20	No change in colour and no staining: Grey Scale 5		No appreciable change in colour and no appreciable staining: Grey Scale 4
Colourfastness to Salt Water	21	No change in colour and no staining: Grey Scale 5		No appreciable change in colour and no appreciable staining: Grey Scale 4
Colourfastness to Light	16** (Option E)		Sample Grey Scale 4 after 40 AATCC Fading Units	
Colourfastness to Perspiration	23	No change in colour and no staining: Grey Scale 5		No appreciable change in colour and no appreciable staining: Grey Scale 4
Colourfastness to Pressing	31 (dry press at 185°C for 20 seconds)	No change in colour and no staining: Grey Scale 5		No appreciable change in colour or staining: Grey Scale 4
Quantitative Analysis	14		Wool: 88%	Nylon: 12%

* CAN/CGSB-4.2 Textile Test Methods

** AATCC Textile Test Methods

Note 1: CAN/CGSB-4.2 Method 15 paragraph 7.4 solvent extraction one of petroleum ether, tetrachloroethylene or hexane shall be used. Also, omit para 7.7 and 7.8.

Table I – Exigences en matière d’essais du tissu fini

Propriété	Méthode d’essai*	Exigence prescrite	Minimum acceptable	Maximum acceptable
Largeur (entre les lisières)	4.1	150 cm	148 cm	152 cm
Masse	5.1	375 g/m ²	363 g/m ²	387 g/m ²
Contexture (fils par cm)	6	Chaîne: 16 Trame: 14	Chaîne: 15 Trame: 13	
Résistance à la rupture	9.2 (Essai 6.1)	Chaîne: 196 N Trame: 196 N	Chaîne: 178 N Trame: 178 N	
Variation dimensionnelle au trempage dans l’eau	25.1			Chaîne: 4 % Trame: 4 %
Matières non fibreuses	15 (voir, plus bas, la note 1)			3.0 %
Solidité de la couleur au nettoyage à sec	29.1	Pas de changement de couleur: Échelle de gris 5		Pas de changement de couleur sensible: Échelle de gris 4
Solidité de la couleur au frottement	22 (Essais 6.1 et 6.2)	Changement de couleur et tachage: Mouillé: Échelle de gris 5 Sec: Échelle de gris 5		Changement de couleur et tachage: Mouillé: Échelle de gris 4 Sec: Échelle de gris 4
Solidité de la couleur à l’eau	20	Pas de changement de couleur ni de tachage: Échelle de gris 5		Pas de changement de couleur ni tachage sensibles: Échelle de gris 4
Solidité de la couleur à l’eau de mer	21	Pas de changement de couleur ni tachage: Échelle de gris 5		Pas de changement de couleur ni tachage sensibles: Échelle de gris 4
Solidité des teintures à la lumière	16** (Option E)		Échantillon - Échelle de gris 4 après l’exposition à 40 unités de décoloration de l’AATCC	
Solidité de la couleur à la sueur	23	Pas de changement de couleur ni tachage: Échelle de gris 5		Pas de changement de couleur ni tachage sensibles: Échelle de gris 4

Propriété	Méthode d'essai*	Exigence prescrite	Minimum acceptable	Maximum acceptable
Solidité des teintures au repassage à chaud	31 (pressage à sec à 185° C pendant 20 secondes)	Pas de changement de couleur et de tache: Échelle de gris 5		Pas de changement de couleur ni tache sensibles: Échelle de gris 4
Analyse quantitative	14		Laine: 88 %	Nylon: 12 %

* CAN/CGSB-4.2 Méthodes pour épreuves textiles

** AATCC Textile Test Methods

Note 1: CAN/CGSB-4.2 Méthode 15, paragraphe 7.4, Élimination de matières non fibreuses par solvant. Un éther de pétrole, le tétrachloroéthylène ou l'hexane, doit être utilisé. Omettre les paragraphes 7.7 et 7.8.

NOTICE



This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

SPECIFICATION

FOR

TAPE, TEXTILE, BIAS, SINGLE FOLD

1. SCOPE

1.1 Scope. This specification covers the requirements for two types of single fold bias tape.

1.2 The tape shall be classified as follows:

Type I Bias tape for disposable items

Type II Bias tape for non-disposable items

2. APPLICABLE DOCUMENTS

2.1 Government documents. Not applicable.

2.2 Other publications. The following publications form part of this specification to the extent specified herein. The effective dates shall be those in effect on the date of publication of this specification. Sources are as shown.

CAN/CGSB-4.2 Textile Test Methods

Canadian General Standards Board

Place du Portage III, 6B1

11 Laurier Street

Gatineau, Quebec K1A 1G6

Telephone: 819-956-0425 or 1-800-665-2472

Email: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca

Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

SPÉCIFICATION

RUBAN, TISSU, BIAIS, SIMPLE

1. PORTÉE

1.1 Portée. La présente spécification vise les exigences pour deux types de ruban de biais simple.

1.2 Le ruban doit être classé comme suit:

Type I Ruban de biais pour des articles jetables

Type II Ruban de biais pour des articles non-jetables

2. DOCUMENTS APPLICABLES

2.1 Documents du gouvernement. Sans objet.

2.2 Autres publications. Les publications suivantes font partie intégrante de la présente spécification selon les modalités indiquées ci-après. La date d'entrée en vigueur doit être celle en vigueur à la date de publication de la présente spécification. La source de diffusion est celle indiquée.

CAN/CGSB-4.2 Méthodes pour épreuves textiles

Office des normes générales du Canada

Place du Portage III, 6B1

11, rue Laurier

Gatineau (Québec) K1A 1G6

Téléphone: 819-956-0425 or 1-800-665-2472

Courriel: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca

Site internet: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-fra.html>

2.3 Sealed patterns. Not applicable.

2.4 Order of precedence.

2.4.1 In the event of any inconsistency in contract documents such as contract, specification and sealed pattern, the order of precedence shall be contract, specification, and sealed pattern.

2.4.2 In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

2.4.3 In the event of inconsistency within this specification, including inconsistency between languages, the Design Authority (DSSPM 2-11) shall be contacted for clarification.

3. REQUIREMENTS

3.1 Workmanship. The material covered by this specification shall be free of imperfections or blemishes such as may adversely affect its appearance or serviceability. For inspection purposes, imperfections and blemishes shall be considered defects when clearly visible at a normal inspection distance of approximately 1 metre under good, preferably North Light, lighting conditions.

3.2 Sealed pattern. A sealed pattern, when available, will be supplied to the successful bidder. Sealed patterns shall constitute the standard only in regard to any properties not defined in this specification. Note, however, that the order of precedence prevails (paragraph 2.4). Sealed patterns must be returned to the Crown and under no circumstances shall be mutilated or cut.

3.3 Yarns. Yarns in both the warp and weft shall be singles, 100% carded cotton or a blend of polyester and cotton with a maximum polyester content of 65%.

3.4 Fabric. The fabric shall be a plain weave. When tested in accordance with the applicable test methods, the following shall apply.

3.4.1 Type I tape. The finished fabric used for Type I tape shall comply with the requirements of Table II.

2.3 Modèles réglementaires. Sans objet.

2.4 Ordre de préséance.

2.4.1 En cas d'incohérence entre les documents contractuels, soit le contrat, la spécification et les échantillons réglementaires, l'ordre de préséance est le suivant: le contrat, la spécification et les échantillons réglementaires.

2.4.2 En cas de divergence entre les documents mentionnés aux présentes et le contenu de la présente spécification, cette dernière a préséance.

2.4.3 En cas d'incohérence dans l'énoncé de la spécification, incluant l'incohérence entre les langues, il faut communiquer avec l'autorité responsable de la conception (DAPES 2-11) pour obtenir des précisions.

3. EXIGENCES

3.1 Qualité d'exécution. Le tissu visé par la présente spécification doit être exempt de défauts pouvant nuire à son aspect ou à sa tenue en service. À des fins d'inspection, sont considérés comme défauts ceux qui sont clairement visibles à une distance d'inspection normale d'environ un mètre sous un bon éclairage, de préférence la lumière du nord.

3.2 Modèle réglementaire. Un modèle réglementaire, lorsque disponible, sera fourni au soumissionnaire retenu. Il doit constituer le modèle normalisé en ce qui a trait seulement à toute propriété non définie dans la présente spécification. Nota – L'ordre de préséance (paragraphe 2.4) doit être respecté. Les modèles réglementaires doivent être renvoyés au gouvernement et ne doivent en aucun cas être endommagés ni coupés.

3.3 Fils. La chaîne et la trame doivent être simples, 100% coton cardé ou un mélange de polyester et coton, avec un maximum de 65% de polyester.

3.4 Tissu. Le tissu doit être à armure unie. Lorsqu'il est mis à l'essai conformément aux méthodes d'essai prescrites, les modalités suivantes s'appliquent.

3.4.1 Type I ruban. Le tissu fini utilisé pour le ruban de Type I doit être conforme aux exigences du tableau II.

3.4.2 Type II tape. The finished fabric used for Type II tape shall comply with the requirements of Table III.

3.5 Colour. Colour shall be as specified in the procurement documents. The colour required shall match the applicable sealed pattern or numerical colour co-ordinates, whichever is specified. All visual colour matching to sealed patterns shall be done in accordance with CAN/CGSB-4.2 No.41 Standard Light Sources for Colour Matching of Textiles. A colour match under north-sky daylight is the most important measurement. Metamerism shall be no greater than that exhibited by the sealed pattern.

3.6 Bias tape. Single fold bias tape shall be made by cutting strips of the finished fabric on the bias (45 degree minimum and 55 degree maximum). Both edges of the fabric strip shall be folded towards the center to give the finished tape widths identified in Table I.

Table I Required widths of tape

Width, cut (± 0.8 mm)	Width, finished (± 0.8 mm)
25.4 mm	12.7 mm
38 mm	19 mm
51 mm	25.4 mm

3.7 Length. Unless otherwise specified, the tape shall be furnished on flat rolls containing approximately 100 meters.

3.8 Roll marking. Each roll shall be labelled with the following information:

- Contractors identification
- Gross length in metres (including allowance)
- Net length in metres
- Nomenclature
- Colour
- Specification number
- Contract number, month, year

3.4.2 Type II ruban. Le tissu fini utilisé pour le ruban de Type II doit être conforme aux exigences du tableau III.

3.5 Couleur. La couleur doit être celle précisée dans les documents d'achat. Elle doit correspondre au modèle réglementaire applicable ou aux couleurs numériques coordonnées, selon le cas. L'appariement visuel des couleurs avec les modèles réglementaires doit être effectué conformément à la norme CAN/CGSB-4.2 no 41, Sources normalisées de lumière pour l'appariement des couleurs des textiles. L'appariement des couleurs sous la lumière du nord est le principal critère. Le métamérisme ne doit pas dépasser celui du modèle réglementaire.

3.6 Ruban de biais. Un ruban de biais simple doit être fait en coupant des lanières sur le biais du tissu fini (45 degré minimum et 55 degré maximum). Les deux côtés de la lanière de tissu doivent être pliés vers le centre pour obtenir les largeurs de biais fini identifiées au Tableau I.

Tableau I Largeurs de ruban requis

Largeur, coupé (± 0.8 mm)	Largeur, fini (± 0.8 mm)
25.4 mm	12.7 mm
38 mm	19 mm
51 mm	25.4 mm

3.7 Longueur. Sauf indication contraire, le ruban doit être fourni sur des rouleaux plats contenant approximativement 100 mètres.

3.8 Marquage des rouleaux. Chaque rouleau doit être étiqueté avec les informations suivantes:

- Nom de l'entrepreneur
- Longueur brute en mètres (y compris la tolérance)
- Longueur nette en mètres
- Nomenclature
- Couleur
- Numéro de la spécification
- Numéro, mois et année du contrat

4. QUALITY ASSURANCE PROVISIONS

4.1 Unless otherwise specified in the contract or procurement documents, the contractor is responsible for the performance of all inspection requirements as specified herein. Contractors may utilize their own or any other inspection facility acceptable to the Government or its designated representative. The Government reserves the right to perform any of the inspections specified herein, where such inspections are deemed necessary to ensure material and services conform to prescribed requirements. The contractor is responsible for ensuring that all material or services submitted to the Government for acceptance comply with all requirements of the contract.

5. PACKAGING

5.1 Packaging and packing. Packaging, packing, marking and delivery of shipping containers shall be in accordance with the terms of the contract.

6. NOTES

6.1 Ordering data. Procurement documents should specify the following:

- a) Title, number and date of this specification
- b) Type of tape required
- c) Colour required (see 3.5)
- d) Packing and marking of shipping containers (see 5.1)
- e) The Design Authority
- f) The Quality Assurance Authority

6.2 Definition of terms.

6.2.1 Design Authority. The Design Authority is the Government agency responsible for technical aspects of design and changes to design. The Design Authority, for the items covered by this specification, is the Directorate of Soldier Systems Program Management (DSSPM).

4. DISPOSITIONS D'ASSURANCE DE LA QUALITÉ

4.1 Sauf indication contraire dans le contrat ou les documents d'achat, l'entrepreneur est tenu d'effectuer les inspections mentionnées dans la présente spécification. Il peut utiliser à cette fin son propre matériel d'inspection ou celui de tout autre établissement acceptable aux yeux du Gouvernement ou à son représentant. Le Gouvernement se réserve le droit d'effectuer les inspections mentionnées dans la présente spécification, lorsqu'elles sont nécessaires pour assurer que le matériel et les services sont conformes aux exigences prescrites. L'entrepreneur doit s'assurer que le matériel et les services proposés au Gouvernement sont conformes aux exigences du contrat.

5. CONDITIONNEMENT

5.1 Conditionnement et emballage. Le conditionnement, l'emballage, le marquage et la livraison des contenants d'expédition doivent être conformes aux modalités du contrat.

6. NOTES

6.1 Données de commande. Les documents d'achat doivent préciser:

- a) Le titre, le numéro et la date de la présente spécification
- b) Type de ruban requis
- c) La couleur requise (voir 3.5)
- d) Les exigences relatives à l'emballage et au marquage des contenants d'expédition (voir 5.1)
- e) L'autorité responsable de la conception
- f) L'autorité responsable de l'assurance de la qualité

6.2 Définitions.

6.2.1 Autorité responsable de la conception. L'autorité responsable de la conception est l'organisme gouvernemental chargé des aspects techniques de la conception et des modifications connexes. Dans le cas de la présente spécification, il s'agit du directeur de l'Administration du programme de l'équipement du soldat (DAPES).

6.2.2 Quality Assurance Authority. The Quality Assurance Authority is the Government agency responsible for providing assurance that material and services supplied by the contractor conform to specified requirements. The Quality Assurance Authority is the Director Quality Assurance.

6.2.3 Master sealed pattern. A master sealed pattern is the authorized prototype of the item to be produced and is held only by the Government.

6.2.4 Sealed pattern. A sealed pattern is a duplicate of the Master Sealed Pattern and is available to the manufacturer to be used as a guide in production.

6.3 The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

6.2.2 Autorité responsable de l'assurance de la qualité. L'autorité responsable de l'assurance de la qualité est l'organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur satisfont aux exigences prescrites. L'autorité responsable de l'assurance de la qualité est le directeur de l'assurance de la qualité.

6.2.3 Modèle réglementaire principal. Prototype autorisé de l'article qui doit être fabriqué et dont le gouvernement est le seul détenteur.

6.2.4 Modèle réglementaire. Copie exacte du modèle réglementaire principal mis à la disposition du fabricant qui doit l'utiliser comme un guide.

6.3 La fabrication d'un produit ou son évaluation conformément à la présente spécification peut nécessiter l'utilisation de matériel ou d'équipement dangereux. La présente spécification n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement liées à son utilisation. Il incombe à l'utilisateur de la présente spécification d'établir au préalable des méthodes appropriées qui tiennent compte des questions d'environnement, de santé et de sécurité, et de déterminer les restrictions réglementaires applicables.

Table II Requirements for Finished Fabric – Type I

Property	Test Method	Specified Requirements	Minimum Acceptable	Maximum Acceptable
Width (between selvages)	4.1*		91 cm	
Fabric Count (yarns per cm)	6*		Warp: 24 Weft: 19	
Mass	5.1*	102 g/m ²	85 g/m ²	119 g/m ²
Breaking Strength	9.1* (Test 6.1)		Warp: 178 N Weft: 110 N	
Dimensional Change in Washing	58* (III.E.3)			Warp: 5% Weft: 5%
Non-fibrous Material	15**			3%
<i>The following colourfastness requirements are applicable to dyed fabrics only.</i>				
Colourfastness to Light	16*** Option E		Sample Grey Scale 4 after 20 AATCC Fading Units	
Colourfastness to Crocking	22* (Tests 6.1 & 6.2)	Dry: GS 5 Wet: GS 5		Dry: GS 4 Wet: GS 3
Colourfastness to Washing	19.1* (Test No. 3)	Colour Change: GS 5 Staining: GS 5		Colour Change: GS 4 Staining: GS 4
Colourfastness to Perspiration	23*	Colour Change: GS 5 Staining: GS 5		Colour Change: GS 4 Staining: GS 4
Colourfastness to Water	20*	Colour Change: GS 5 Staining: GS 5		Colour Change: GS 4 Staining: GS 4

* CAN/CGSB-4.2 Textile Test Methods

** CAN/CGSB-4.2 Method 15, aqueous and enzyme treatments only.

*** AATCC Textile Test Methods

Tableau II Exigences relatives au fini du tissu – Type I

Propriété	Méthode d'essai*	Exigence prescrite	Minimum acceptable	Maximum acceptable
Largeur (entre les lisières)	4.1*		91 cm	
Contexture (fils per cm)	6*		Chaîne: 24 Trame: 19	
Masse	5.1*	102 g/m ²	85 g/m ²	119 g/m ²
Résistance à la rupture	9.1* (Essai 6.1)		Chaîne: 178 N Trame: 110 N	
Variation dimensionnelle au trempage dans l'eau	58* (III.E.3)			Chaîne: 5% Trame: 5%
Matières non fibreuses sur les textiles	15**			3%
<i>Les exigences suivantes en matière de solidité de la couleur sont seulement applicables aux tissus teints.</i>				
Solidité des teintures à la lumière	16*** (Option E)		Échantillon – Échelle de gris 4 après l'exposition à 20 unités de décoloration de l'AATCC	
Solidité de la couleur au frottement	22* (Essais 6.1 et 6.2)	Sec: Échelle de gris 5 Mouillé: Échelle de gris 5		Sec: Échelle de gris 4 Mouillé: Échelle de gris 3
Solidité de la couleur au lavage	19.1* (Essai no. 3)	Changement de couleur et tache: échelle de gris 5		Changement de couleur et tache: échelle de gris 4
Solidité de la couleur à la sueur	23*	Changement de couleur et tache: échelle de gris 5		Changement de couleur et tache: échelle de gris 4
Solidité de la couleur à l'eau	20*	Changement de couleur et tache: échelle de gris 5		Changement de couleur et tache: échelle de gris 4

* CAN/CGSB-4.2 Méthodes pour épreuves textiles

** CAN/CGSB-4.2 Méthode 15, seulement les traitements en milieu aqueux et enzymatique.

*** AATCC Textile Test Methods

Table III Requirements for Finished Fabric – Type II

Property	Test Method	Specified Requirements	Minimum Acceptable	Maximum Acceptable
Width (between selvages)	4.1*		91 cm	
Fabric Count (yarns per cm)	6*	Note 1		
Mass	5.1*	136 g/m ²	102 g/m ²	186 g/m ²
Breaking Strength	9.2*	Note 2		
Dimensional Change in Washing	58* (III.E.3)			Chaîne: 5% Trame: 5%
Non-fibrous Material	15**			3%
<i>The following colourfastness requirements are applicable to dyed fabrics only.</i>				
Colourfastness to Light	16*** Option E		Sample Grey Scale 4 after 20 AATCC Fading Units	
Colourfastness to Crocking	22* (Tests 6.1 & 6.2)	Dry: GS 5 Wet: GS 5		Dry: GS 4 Wet: GS 3
Colourfastness to Washing	19.1* (Test No. 3)	Colour Change: GS 5 Staining: GS 5		Colour Change: GS 4 Staining: GS 4
Colourfastness to Perspiration	23*	Colour Change: GS 5 Staining: GS 5		Colour Change: GS 4 Staining: GS 4
Colourfastness to Water	20*	Colour Change: GS 5 Staining: GS 5		Colour Change: GS 4 Staining: GS 4

* CAN/CGSB-4.2 Textile Test Methods

** CAN/CGSB-4.2 Method 15, aqueous and enzyme treatments only.

*** AATCC Textile Test Methods

Tableau III Exigences relatives au fini du tissu – Type II

Propriété	Méthode d'essai*	Exigence prescrite	Minimum acceptable	Maximum acceptable
Largeur (entre les lisières)	4.1 *		91 cm	
Contexture (fils per cm)	6*	Remarque 1		
Masse	5.1*	136 g/m ²	102 g/m ²	186 g/m ²
Résistance à la rupture	9.1* (Essai 6.1)	Remarque 2		
Variation dimensionnelle au trempage dans l'eau	58* (III.E.3)			Chaîne: 5% Trame: 5%
Matières non fibreuses sur les textiles	15**			3%
<i>Les exigences suivantes en matière de solidité de la couleur sont seulement applicables aux tissus teints.</i>				
Solidité des teintures à la lumière	16*** (Option E)		Échantillon – Échelle de gris 4 après l'exposition à 20 unités de décoloration de l'AATCC	
Solidité de la couleur au frottement	22* (Essais 6.1 & 6.2)	Sec: Échelle de gris 5 Mouillé: Échelle de gris 5		Sec: Échelle de gris 4 Mouillé: Échelle de gris 3
Solidité de la couleur au lavage	19.1* (Essai no. 3)	Changement de couleur et tache: échelle de gris 5		Changement de couleur et tache: échelle de gris 4
Solidité de la couleur à la sueur	23*	Changement de couleur et tache: échelle de gris 5		Changement de couleur et tache: échelle de gris 4
Solidité de la couleur à l'eau	20*	Changement de couleur et tache: échelle de gris 5		Changement de couleur et tache: échelle de gris 4

* CAN/CGSB-4.2 Méthodes pour épreuves textiles

** CAN/CGSB-4.2 Méthode 15, seulement les traitements en milieu aqueux et enzymatique.

*** AATCC Textile Test Methods

Note 1 A fabric with a total thread count of 59 minimum would be acceptable, providing the weft thread count is not less than 22.

Note 2 A fabric with a combined warp and weft breaking strength of 445 N minimum would be acceptable, providing the weft tensile strength is not less than 110 N.

Remarque 1 Un tissu avec un nombre total minimum de fil de 59 serait acceptable à condition que le compte de fil de trame est d'au moins 22.

Remarque 2 Un tissu ayant une résistance combinée à la rupture de chaîne et de trame d'au minimum 445 N serait acceptable à condition que la résistance à la rupture de trame est d'au moins 100 N.

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PART 1 - GENERAL INFORMATION

1.1 Security Requirement

There is no security requirement associated with this bid solicitation.

1.2 Statement of Requirement

The "Requirement" is detailed under Annex A of the resulting contract clauses.

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days **from** receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

The requirement is subject to the provisions of the Agreement on Internal Trade (AIT).

1.5 Canadian Content

The requirement is limited to Canadian goods.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2015/07/03) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 120 days

2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

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2.5 Technical Data and Samples

Technical data and samples may be viewed (by appointment only) at the following offices:

Public Works & Government Services Canada
Supply Directorate
6th floor
1550 ave D'Estimauville
Quebec, Que. G1J 0C7
TEL: 418-649-2714
FAX: 418-648-2209
Attention: Micheline Naud (micheline.naud@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada
Place Bonaventure, South-East Portal
800 de La Gauchetière Street West, 7th Floor
Montreal, Quebec H5A 1L6
TEL: 514-496-3404
FAX: 514-496-3822
Attention: Viviane Rouhault (viviane.rouhault@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada
Suite 480, 33 City Centre Drive
Mississauga, Ont. L5B 2N5
TEL: 905-615-2070
FAX 905-615-2023
Attention: [Hodan A. Ahmed \(hodan.a.ahmed@tpsgc-pwgsc.gc.ca\)](mailto:hodan.a.ahmed@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada
Suite 100, 167 Lombard Avenue
P.O. Box 1408
Winnipeg, Manitoba R3C 2Z1
TEL: 204-983-3774
FAX: 204-983-7796
Attention: Bev Laurin (bev.laurin@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada
Telus Plaza North
10025 Jasper Avenue, 5th Floor
Edmonton, AB T5J 1S6
TEL: (780) 497-3564
FAX: (780) 497-3510
Attention: Nicole Boucher (wst-pa-edm@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada
Pacific Region, SOSB, Industrial & Commercial Products
219 - 800 Burrard Street
Vancouver, B.C V6Z 0B9
TEL: 604-775-7630
FAX: 604-775-7526
Attention: Linda Harding (linda.harding@pwgsc-tpsgc.gc.ca)

2.6 Technical Data

In order to receive Technical Data Packages against this solicitation, bidders must provide the following details with their request:

- Company Name
- Complete mailing & physical address (p.o. box numbers not acceptable)
- Area code and telephone number
- Contact name
- E-mail address
- Solicitation Number & Closing Date

and send their request (by facsimile message or e-mail) to the following:

E-mail : Joyce.MacLeod @tpsgc-pwgsc.gc.ca

or

Facsimile : 819-956-5454

It is imperative that the request be done as soon as possible to ensure timely receipt.

Notwithstanding Canada must not be held responsible for untimely release of the technical data.

2.7 Sealed Pattern - Return to Sender

The sealed patterns which may have been sent to you, are to be returned to the sender, if you are the unsuccessful Bidder. The sealed patterns are not to be mutilated or cut, and must be returned in the same condition as sent to the Bidder.

2.8 Specifications and Standards

2.8.1 United States Military Specifications and Standards

The Bidder is responsible for obtaining copies of all United States (US) military specifications and standards which may be applicable to the requirement. These specifications and standards are available commercially, or may be obtained by visiting the US Department of Defense Website, at the following address: http://assistdocs.com/search/search_basic.cfm

2.8.2 Canadian General Standards Board (CGSB) - Standards

A copy of the CGSB Standards referred to in the bid solicitation is available and may be purchased from:

Canadian General Standards Board

Place du Portage III, 6B1

11 Laurier Street

Gatineau, Québec

Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)

Fax: (819) 956-5740

E-mail: ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca

CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

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2.9 Transportation Costs Information

The Bidder is requested to provide the following information concerning transportation costs for the delivery of the units to destination:

- (a) shipping weight by unit; _____
- (b) number of items by unit; _____
- (c) cubic measurement by unit; _____
- (d) number of units per shipment: _____
- (e) name of shipping point; _____
- (f) recommended method of shipment and carrier _____
- (g) Unit cost per Destination WB941: \$ _____ W248A: \$ _____
- (h) Total cost \$ _____

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

- Section I: Technical Bid (3 hard copies)
- Section II: Financial Bid (1 hard copy)
- Section III: Certifications (1 hard copy)
- Section IV: Additional Information (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation;

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and

2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

3) Green Initiatives (for PWGSC information only)

Bidders are requested to provide details of their policies and practices in relation to the following initiatives:

- environmentally responsible manufacturing;
- environmentally responsible waste disposal;
- waste reduction;
- packaging;
- re-use strategies;
- recycling.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work (reference pre-award sample, Part 4, Evaluation Procedures, 1.1.1 Mandatory Technical Criteria).

Section II: Financial Bid Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

3.1.1 Exchange Rate Fluctuation

C3011T 2013/11/06 Exchange Rate Fluctuation

Section III: Certifications

Bidders must submit the certifications required under Part 5.

Section IV: Additional Information

3.1.2 Origin of Work

For each line item, bidders must identify the name(s) of the country or countries where the apparel goods are cut (or knit to shape) and sewn, regardless of whether the work is to be performed by the Bidder or one of its subcontractor(s).

The following information must be provided for each location where any of the goods are cut (or knit to shape) or sewn:

Line Item number _____

Country: _____

(Bidders must add additional lines if there is more than one manufacturer or one country per line item.)

Bidders must immediately inform Canada in writing of any and all changes affecting the information provided under this clause during the entire bid validity period.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

Pre-Award Sample(s) and Supporting Documentation

As part of the technical evaluation, to confirm a Bidder's capability of meeting the technical requirements, one (1) pre-award sample of the **following items: 001 and 002** must be included with the bid.

Item 001: Mitten, Shells, Extreme Cold Weather – Size Medium
NSN# 8415-21-5105951

Item 002: Mitten, Inserts, Extreme Cold Weather – Size Medium
NSN # 8415-21-5105961

The Bidder must ensure that the required pre-award samples are manufactured in accordance with the technical requirement and is/are fully representative of the bid submitted. Rejection of the pre-award samples will result in the bid being declared non-responsive.

The Bidder must deliver the required pre-award samples and test results and certificates of compliance at no charge to Canada and must ensure that they are with the bid at time and place of bid closing. Failure to submit the required pre-award samples and test results and certificates of compliance within the specified time frame will result in the bid being declared non-responsive. The samples submitted by the Bidder will remain the property of Canada.

Laboratory test results for the following are required as defined herein:

Leather, Goatskin, Aniline, Chrome, Tanned, Gloving – ANNEX C – Appendix 1, Table I

- pH of Leather – Test result to confirm pH of Leather requirement in specification DSSPM 2-3-LI-3-5
- Water Resistance - Test result to confirm Water Resistance requirement in specification DSSPM 2-3-LI-3-5
- Tear Strength (Initial & After Abrasion) - Test result to confirm Tear Strength requirements (Initial & After Abrasion) in specification DSSPM 2-3-LI-3-5

Leather, Cowhide, Split, Chrome, Tanned, Gloving – ANNEX C – Appendix 2, Table I

- pH of Leather – Test result to confirm pH of Leather requirement in specification DSSPM 2-3-80-137

Leather, Cowhide, Split, Chrome, Tanned, Gloving – ANNEX C – Appendix 2, Table II

- Tensile Strength (Average) – Test result to confirm Tensile Strength (Average) of Leather requirement in specification DSSPM 2-3-80-137
- Tongue Tear Strength (Average) - Test result to confirm Tongue Tear Strength (Average) of Leather requirement in specification DSSPM 2-3-80-137

Laboratory analysis of the product offered showing complete test results or test results for specific tests listed hereunder (officer to verify) of physical properties detailed in the technical requirement must be provided with the pre-award sample. Unless otherwise specified, all testing and test methods must be in accordance with the specified requirements. An accredited independent laboratory familiar with textile, leather, and/or handwear-related testing must conduct all testing unless otherwise stated. Testing carried out by university textile testing laboratories will also be acceptable. The laboratory report and test results must be within six months of the Request for Proposal posting date.

AND

In addition, Certificate of Compliance for the following is required as defined herein:

Leather, Goatskin, Aniline, Chrome, Tanned, Gloving – ANNEX C – Appendix 1, Table I

- Chromium Oxide in Leather – Test result to confirm Chromium Oxide in Leather requirement in specification DSSPM 2-3-LI-3-5
- Colourfastness to Rubbing (Crocking) – Test result to confirm Colourfastness to Rubbing (Crocking) requirement in specification DSSPM 2-3-LI-3-5
- Water Vapour Diffusion – Test result to confirm Water Vapour Diffusion requirement in specification DSSPM 2-3-LI-3-5
- Shrinkage Temperature – Test result to confirm Shrinkage Temperature requirement in specification DSSPM 2-3-LI-3-5

Leather, Cowhide, Split, Chrome, Tanned, Gloving – ANNEX C – Appendix 2, Table I

- Chromic Oxide – Test result to confirm Chromic Oxide requirement in specification DSSPM 2-3-80-137

Leather, Cowhide, Split, Chrome, Tanned, Gloving – ANNEX C – Appendix 2, Table II

- Shrinkage Temperature – Test result to confirm Shrinkage Temperature requirement in specification DSSPM 2-3-80-137

Cloth, Cotton, Duck, Unbleached, Plied yarns – ANNEX C – Appendix 3, Table 1

- C of C to confirm that , Cotton, Duck, Unbleached, Plied yarns are in accordance with purchase description DSSPM 2-2-PD-117a

CERTIFICATE OF COMPLIANCE - DEFINITION

A Certificate of Compliance is a written statement from the Bidder guaranteeing the full compliance of the item offered to **the portion of the specification referenced in the Pre-Award Samples and Supporting Documentation clause**. This document must be on official company stationery; it must be dated after RFP posting date; it must make reference to the applicable specification and have the original signature of the company's designated representative. Canada reserves the right to verify the statements made in the Certificate of Compliance. Full test results, demonstrating the product's compliance, will be accepted in lieu of a Certificate of Compliance.

Government-supplied Materials (GSM) will not be supplied for the pre-award sample. In lieu of GSM, the Bidder will be required to use commercially available material which resembles, as close as possible, the GSM. All other materials which are supplied by the Bidder must be in accordance with the technical requirement.

The pre-award samples will be evaluated for quality of workmanship and conformance to specified manufacturing process and finishing.

The Bidder must deliver the required pre-award sample at no charge to Canada and must ensure that it is received with the bid at time and place of bid closing. Failure to submit the pre-award sample within the specified time frame will result in the bid being declared non-responsive. The samples submitted by the Bidder will remain the property of Canada.

The requirement for a pre-award sample will not relieve the successful bidder from submitting samples and test results and certificates of compliance as required by the contract terms or from strictly adhering to the technical requirement of this Request For Proposal and any resultant contract.

4.1.2 Financial Evaluation

4.1.2.1 Mandatory Financial Criteria

- a. The Bidder must submit firm unit price(s) in Canadian dollars, applicable taxes are excluded, DDP (Montreal, Quebec and Edmonton, Alberta) Incoterms 2000, transportation costs included, all applicable Customs Duties and Excise taxes included.
- b. The Bidder must submit firm unit pricing for all items and all destinations including options. The Bidder is requested to quote firm unit pricing at no more than two decimal points.
- c. The Bidder must submit the Government-supplied Material (GSM) usage for each item at Annex A under Article 6.

4.1.2.2 SACC MANUAL CLAUSE

A9033T 2012/07/16 Financial Capability

4.2 Basis of Selection

A bid must comply with all requirements of the bid solicitation and meet all mandatory technical and financial evaluation criteria to be declared responsive.

The responsive bid with the lowest evaluated aggregate price will be recommended for award of a contract (1 contract only). Evaluation will be established using the firm quantities for all items, including all destinations and 100% of the option quantities .

Usage of Government-supplied Material (GSM) is a component of the bid price and will be a factor in bid evaluation. The price evaluation will be based on prices quoted plus the cost of GSM.

4.3 Contract Financial Security

1. If this bid is accepted, the Bidder may be required to provide contract financial security, after the bid closing date and within 10 calendar days from receipt of a written request from the Contracting Authority.
 - (a) a security deposit as defined in clause "Security Deposit Definition" in the amount of up to ten percent (10%) of the contract price.
2. Security deposits in the form of government guaranteed bonds with coupons attached will be accepted only if all coupons that are unmaturing, at the time the security deposit is provided, are attached to the bonds. The Contractor must provide written instructions concerning the action to be taken with respect to coupons that will mature while the bonds are pledged as security, when such coupons are in excess of the security deposit requirement.
3. If Canada does not receive the required financial security within the specified period, Canada may, as its discretion, accept another offer, issue a new bid solicitation, award a contract or reject all the bids.

4.4 Security Deposit Definition

1. "security deposit" means
 - (a) a bill of exchange that is payable to the Receiver General for Canada, and certified by an approved financial institution or drawn by an approved financial institution on itself; or
 - (b) a Government guaranteed bond; or
 - (c) an irrevocable standby letter of credit, or
 - (d) such other security as may be considered appropriate by the Contracting Authority and approved by Treasury Board;
2. "approved financial institution" means
 - (a) any corporation or institution that is a member of the Canadian Payments Association;
 - (b) a corporation that accepts deposits that are insured by the Canada Deposit Insurance Corporation or the "Régie de l'assurance-dépôts du Québec" to the maximum permitted by law;
 - (c) a credit union as defined in paragraph 137(6) the *Income Tax Act*;
 - (d) a corporation that accepts deposits from the public, if repayment of the deposits is guaranteed by Canadian province or territory; or
 - (e) the Canada Post Corporation.
3. "government guaranteed bond" means a bond of the Government of Canada or a bond unconditionally guaranteed as to principal and interest by the Government of Canada that is:
 - (a) payable to bearer;
 - (b) accompanied by a duly executed instrument of transfer of the bond to the Receiver General for Canada in accordance with the *Domestic Bonds of Canada Regulations*;
 - (c) registered in the name of the Receiver General for Canada.

-
4. "irrevocable standby letter of credit"
- (a) means any arrangement, however named or described, whereby a financial institution (the "Issuer"), acting at the request and on the instructions of a customer (the "Applicant"), or on its behalf,
 - (i) will make a payment to or to the order of Canada, as the beneficiary;
 - (ii) will accept and pay bills of exchange drawn by Canada;
 - (iii) authorizes another financial institution to effect such payment, or accept and pay such bills of exchange; or
 - (iv) authorizes another financial institution to negotiate, against written demand(s) for payment, provided that the conditions of the letter of credit are complied with.
 - (b) must state the face amount which may be drawn against it;
 - (c) must state its expiry date;
 - (d) must provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by the authorized departmental representative identified in the letter of credit by his/her office;
 - (e) must provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face amount of the letter of credit;
 - (f) must provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600. Pursuant to the ICC UCP, a credit is irrevocable even if there is no indication to that effect; and
 - (g) must be issued (Issuer) or confirmed (Confirmer), in either official language, by a financial institution that is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

5.1.1 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

5.1.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

5.1.3 Additional Certifications Precedent to Contract Award

5.1.3.1 Canadian Content Certification

5.1.3.1.1 SACC Manual clause A3050T (2014/11/27) Canadian Content Definition

Rules of Origin - Apparel

With reference to the Canadian Content Certification clause, apparel goods are considered to be Canadian goods according to the North American Free Trade Agreement Rules of Origin as follows:

Apparel goods classified in Chapters 61 and 62 of the Harmonized System that are both cut (or knit to shape) and sewn in Canada will be considered Canadian goods.

Canadian Content Certification

This procurement is limited to Canadian goods.

The Bidder certifies that:

() the goods offered are Canadian goods as defined in paragraph 1 of clause A3050T.

Plant Location

Items will be manufactured at: _____

5.1.3.2 Sample(s) and Production Certification

The Bidder certifies that:

() the manufacturer that produced the pre-award sample(s) will remain unchanged for the pre-production sample(s) and full production of the contract quantity.

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

6.1.1 There is no security requirement applicable to this Contract.

6.2 Statement of Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex A.

6.2.1 Technical Requirement

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

2030 (2015/07/03), General Conditions - Goods (Higher Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery Date

Delivery - Firm Quantity - Phased

The first delivery is requested to be made within 45 calendar days from the date of the written notice of approval of pre-production samples and receipt of Government-Supplied Material (GSM).

The quantity delivered is requested to be 600 pairs. The balance is requested to be delivered at the rate of 600 pairs weekly after the first delivery until completion of the Contract.

The Contractor is to offer their very best delivery schedule below:

The first delivery must be made within _____ calendar days from the date of the written notice of approval of pre-production samples and receipt of Government-Supplied Material (GSM).

The quantity delivered must be _____ sets. The balance must be delivered at the rate of _____ sets every two weeks after the first delivery until completion of the Contract.

Delivery - Option Quantity (Option 1)

The delivery of the option quantity must commence within 60 calendar days from receipt of the contract amendment and receipt of Government-Supplied Material (GSM) and after final delivery of the contract quantity. The quantity delivered must be _____ pairs. The balance must be shipped at a rate of _____ pairs weekly after the first delivery until completion of the option quantity.

Delivery - Option Quantity (Option 2)

The delivery of the option quantity must commence within _____ calendar days from receipt of the contract amendment and receipt of Government-Supplied Material (GSM) and after final delivery of the contract quantity. The quantity delivered must be 600 pairs. The balance must be shipped at a rate of _____ pairs weekly after the first delivery until completion of the option quantity.

Delivery - Option Quantity (Option 3)

The delivery of the option quantity must commence within 60 calendar days from receipt of the contract amendment and receipt of Government-Supplied Material (GSM) and after final delivery of the contract quantity. The quantity delivered must be _____ pairs. The balance must be shipped at a rate of _____ pairs weekly after the first delivery until completion of the option quantity.

6.4.1.1 Delivery - Appointments

The Contractor must make deliveries to Canadian Forces (CF) Supply Depots by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the Depot Traffic Section at the appropriate location shown below. The consignee may refuse shipments when prior arrangements have not been made.

- (a) 7 CF Supply Depot Lancaster Park
Edmonton, Alta
780-973-4011, ext. 4524
- (b) 25 CF Supply Depot Montreal
Montreal, Qué.
514-252-2777, ext. 2363

6.4.1.2 Preparation for Delivery

The Contractor must prepare item numbers 001 & 002 for delivery in accordance with the latest issue of the Canadian Forces Packaging Specification D-LM-008-036/SF-000, DND Minimum Requirements for Manufacturer's Standard Pack.

The Contractor must package **item numbers 001 & 002** in quantities of **10 pairs by package**.

6.4.1.3 Bulk Shipments

For bulk shipments, all cartons must be shipped on 40" x 48" pallets shrink-wrapped or equivalent with overall height not to exceed 42".

6.4.1.4 Shipping Instructions - Delivery at Destination

1. Goods must be consigned to the destination specified in the Contract and Delivered Duty Paid (DDP) Montreal, Quebec & Edmonton, Alberta) Incoterms 2000 for shipments from commercial contractor.

6.4.1.5 SACC Manual Clauses

B7003C	2014/06/26	Clothing – Government-supplied Material
D2000C	2007/11/30	Marking
D5545C	2010/01/11	Procedures for Design Change/Deviations
D5545C	2010/08/16	ISO 9001:2008 - Quality Management Systems - Requirements (QAC C)
D5606C	2012/07/16	Release Documents (DND) - Canadian-based Contractor
D6010C	2007/11/30	Palletization

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Joyce MacLeod
Public Works and Government Services Canada
Acquisitions Branch
Commercial and Consumer Products Directorate (CCPD)
Clothing & Textiles Division
Place du Portage, Phase III, 6A2
11 Laurier Street
Gatineau, Quebec K1A 0S5
Telephone : 819-934-0983 Facsimile: 819-956-5454
E-mail address: Joyce.MacLeod@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Technical Authority

The Technical Authority for this Contract is:

Mailing/Shipping Address

Department of National Defence
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2
Attn: DSSPM _____(to be advised at contract)

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative

The person responsible for :

General enquiries

Name: _____
Telephone No.: _____
Facsimile No.: _____
E-mail address: _____

Delivery follow-up

Name: _____
Telephone No.: _____
Facsimile No.: _____
E-mail address: _____

6.6 Payment

6.6.1 Basis of Payment – Firm Unit Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified in Annex A for a cost of \$ (amount to be inserted at contract award). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.2 SACC Manual Clauses

H1001C 2008/05/12 Multiple Payments

6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - a) One (1) copy must be forwarded to the following address :

National Defence Headquarters
MGen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A 0K2
Attn: DLP _____
Email: _____ (to be inserted at contract award)

(b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

(c) The original and one (1) copy must be forwarded to the consignee for certification and payment.

6.8 Certifications

6.8.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

6.8.2 SACC Manual Clauses

A3060C 2008/05/12 Canadian Content Certification

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the Articles of Agreement;
- b) the general conditions 2030 (2015/07/03), General Conditions - Goods (Higher Complexity);
- c) Annex A, Statement of Requirement;
- d) Specifications;
- e) Drawings;
- f) Sealed Patterns;
- g) the Contractor's bid dated _____

6.11 Defence Contract

SACC *Manual* clause

A9006C (2012/07/16) Defence Contract

6.12 SACC Manual Clauses

H1001C 2008/05/12 Multiple Payments

6.13 Materials: Contractor's Supply and Government Supplied Material

The Contractor will be responsible for obtaining all materials required in the manufacture of the item(s) specified except those materials specified as being Government-supplied. The delivery stated herein allows the necessary time to obtain such materials.

6.14 Procedures for Design Change/Deviations

The Contractor must follow these procedures for any proposed design change/deviation to contract specifications.

The Contractor must complete Part 1 of the Design Change/Deviation form DND 672 and forward one (1) copy to the Technical Authority and one (1) copy to the Contracting Authority.

The Contractor will be authorized to proceed upon receipt of the design change/deviation form signed by the Contracting Authority. A contract amendment will be issued to incorporate the design change/deviation in the Contract.

6.15 Plant Closing

The Contractor's plant closing for Christmas and Summer holidays are as follows. During this time there will be no shipments.

Year 1 (2015-2016)

Christmas Holiday	FROM _____	TO _____
Summer Holiday	FROM _____	TO _____

Year 2 (2016-2017)

Christmas Holiday	FROM _____	TO _____
Summer Holiday	FROM _____	TO _____

Solicitation No. - N° de l'invitation
W8486-151779/A
Client Ref. No. - N° de réf. du client
W8486-151779

Amd. No. - N° de la modif.
File No. - N° du dossier
pr713. W8486-151779

Buyer ID - Id de l'acheteur
pr713
CCC No./N° CCC - FMS No./N° VME

Year 3 (2017-2018)

Christmas Holiday
Summer Holiday

FROM _____
FROM _____

TO _____
TO _____

6.16 Plant Location

Items will be manufactured at: _____

6.17 Subcontractor(s)

The following subcontractor(s) will be utilized in the performance of the contract.

Name of Company: _____

Location: _____

Value of subcontract: \$ _____

Nature of subcontracting work performed: _____

Subcontractors, other than those listed above, may not be utilized without the written permission of Canada.

6.18 Origin of Work - Disclosure of Information

1. For each line item, the Contractor must specify the name(s) of all countries where the apparel goods are cut (or knit to shape) or sewn, regardless of whether the work is to be performed by the Contractor or one of its subcontractor(s).

2. The Contractor agrees that Canada may publicly disclose the information provided with respect the countries of origin.

3. The Contractor must immediately inform Canada in writing of any and all changes affecting the information provided under this clause during the entire contract period.

6.19 Overshipment

Overshipment will not be accepted unless prior approval is obtained from the Contracting Authority.

6.20 Pre-Production Samples

1. The Contractor must provide pre-production sample of of the following items: **item 001 & item 002**, accompanied by the sealed patterns if applicable, to the Technical Authority for acceptance within **21 calendar days** from date of contract award and receipt of Government-supplied Material (GSM).

2. If the pre-production samples are rejected, the Contractor must submit second pre-production samples within **15 calendar days** of notification of rejection from the Technical Authority.

3. If the pre-production samples are accepted by either full acceptance or conditional acceptance, the Contractor must proceed with production as per the Contract requirements.

4. Rejection by the Technical Authority of the second pre-production sample(s) submitted by the Contractor for failing to meet the contract requirements will be grounds for termination of the Contract for default.

5. The Contractor must carry out all required inspection and tests to verify conformance to the technical requirements of the Contract.

6. In addition to providing the pre-production samples, the Contractor must provide a copy of the inspection reports and laboratory test reports and Certificates of compliance, as applicable, to the Contracting Authority and Technical Authority, transportation charges prepaid, and without charge to Canada.

7. The pre-production samples submitted by the Contractor will remain the property of Canada.
8. The Technical Authority will notify the Contractor, in writing, of the full acceptance, conditional acceptance, or rejection of the pre-production samples. A copy of this notification will also be provided by the Technical Authority to the Contracting Authority. The notice of the full acceptance or conditional acceptance does not relieve the Contractor from complying with all requirements and conditions of the Contract.
9. The Contractor must not commence or continue with production of the items and must not make any deliveries until the Contractor has received a written notification from the Technical Authority that the pre-production samples are fully acceptable or conditionally acceptable. Any production of items before pre-production sample acceptance will be at the sole risk of the Contractor.
10. The pre-production samples may not be required if the Contractor is currently in production. The request for waiver of pre-production sample(s) must be made by the Contractor in writing to the Contracting Authority. The waiving of this requirement will be at the sole discretion of the Technical Authority and will be evidenced through a contract amendment.

CERTIFICATE OF COMPLIANCE – DEFINITION

A Certificate of Compliance is a written statement from the Bidder guaranteeing the full compliance of the item offered to the portion of the specification referenced in the Pre-Award Samples and Supporting Documentation clause. This document must be on official company stationery; it must be dated after RFP posting date; it must make reference to the applicable specification and have the original signature of the company's designated representative. Canada reserves the right to verify the statements made in the Certificate of Compliance. Full test results, demonstrating the product's compliance, will be accepted in lieu of a Certificate of Compliance.

LABORATORY ANALYSIS - DEFINITION

Laboratory analysis of the product offered showing test results for specific tests listed hereunder of physical properties detailed in the technical requirement must be provided with the pre-production samples. Testing must be performed by an independent accredited laboratory establishment and must be in accordance with the test methods detailed in the technical requirement. The laboratory report and test results must be dated within six months of the request for proposal posting date.

6.20.1 Sealed Pattern - Guidance Only

The sealed patterns are representative of the required item but are not part of the technical requirement. The sealed patterns may not meet the technical requirement in all respects and must be used for guidance only during production.

6.20.2 Sealed/Viewing Patterns - Return to Sender

The sealed patterns which may have been sent to the Contractor, are to be returned to the sender upon completion of Contract.

The sealed patterns are not to be mutilated or cut, and must be returned in the same condition as sent to the Contractor.

6.21 Specifications and Standards

6.21.1 United States Military Specifications and Standards

The Contractor is responsible for obtaining copies of all United States (US) military specifications and standards which may be applicable to the requirement. These specifications and standards are available commercially, or may be obtained by visiting the US Department of Defense Website, at the following address: http://assistdocs.com/search/search_basic.cfm

6.21.2 Canadian General Standards Board (CGSB) - Standards

A copy of the CGSB Standards referred to in the Contract is available and may be purchased from:

Canadian General Standards Board
Place du Portage III, 6B1
11 Laurier Street
Gatineau, Québec
Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)
Fax: (819) 956-5740
E-mail: ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

6.22 Financial Security

1. Canada may convert the security deposit to the use of Canada if any circumstance exists which would entitle Canada to terminate the Contract for default, but any such conversion will not constitute termination of the Contract.
2. Where Canada so converts the security deposit:
 - (a) the proceeds will be used by Canada to complete the Work according to the conditions of the Contract, to the nearest extent that it is feasible to do so and any balance left will be returned to the Contractor on completion of the warranty period; and
 - (b) if Canada enters into a Contract to have the Work completed, the Contractor will:
 - (i) be considered to have irrevocably abandoned the Work; and
 - (ii) remain liable for the excess cost of completing the Work if the amount of the security deposit is not sufficient for such purpose. "Excess cost" means any amount over and above the amount of the Contract Price remaining unpaid together with the amount of the security deposit.
3. If Canada does not convert the security deposit to the use of Canada before completion of the contract period, Canada will return the security deposit to the Contractor within a reasonable time after such date.
4. If Canada converts the security deposit for reasons other than bankruptcy, the financial security must be reestablished to the level of the amount stated above so that this amount is continued and available until completion of the contract period.

ANNEX 'A'

STATEMENT OF REQUIREMENT

1. TECHNICAL REQUIREMENT

The Contractor is required to provide Canada for the Department of National Defence (*DND*) with Mittens, Shell, Extreme Cold Weather (NSN# 8415-21-104-2104) and Mittens, Insert, Extreme Cold Weather (NSN# 8415-21-104-2179) in accordance with the patterns, drawings and sealed patterns indicated in the DDL (dated 14-11-07).

APPLICABLE DOCUMENTS

Mitten, Shell, Extreme Cold Weather and Mitten Insert, Extreme Cold Weather:

Annex C:	DSSPM 2-2-87-2104 Manufacturing Data for Mittens, Shell, Extreme Cold Weather (ECW)
Appendix 1 to Annex C:	DSSPM 2-3-LI-3-5 Leather Goat Skin, Aniline, Chrome Tanned, Gloving
Appendix 2 to Annex C:	DSSPM 2-3-80-137 Leather, Cowhide, Split, Chrome Tanned
Appendix 3 to Annex C:	DSSPM 2-2-PD-117a Purchase Description for Cloth, Cotton, Duck, Unbleached, Plied Yarns
Annex D:	DSSMP 2-3 87-2079 Manufacturing Data for Mittens, Insert, Extreme Cold Weather (ECW)
DSSPM 2-2-80-047	Specification for Tape, Textile, Bias, Single Fold
D-80-001-091/SF-001	Cloth, Plain Weave, Nylon, 195 g/m ² and 230g/m ²
DSSPM 2-2-80-042	Specification for Cloth, Melton, Wool, 375 g/m ²

2. ADDRESSES

Destination Address	Invoicing Address
WB941 Department of National Defence 25 CFSD Montreal 6363 Notre Dame St. E. Montreal, Quebec H1N 1V9	W1941 Department of National Defence CFSD Montreal P.O. Box 4000 Stn K Montreal, Quebec H1N 3R9 Attention: Accounts payable
W248A Department of National Defence 7 CF Supply Depot 195 Ave & 82nd St., Bldg. 236 Edmonton, Alberta T5J 4J5	W2481 Department of National Defence 7 CF Supply Depot Stn Forces, P.O. Box 10500 Edmonton, Alberta T5J 4J5 Attention: Accounts payable

3. DELIVERABLES

CONTRACT QUANTITY

Firm Quantity

Item	Description	Unit of Issue	Destination	Firm Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
001	Mitten Shell, Extreme Cold Weather	Pair	Edmonton	6,080	\$ _____
			Montreal	9,120	\$ _____

SIZE ROLL

NSN	Size	Destination (pair)		Total
		Montreal	Edmonton	
N8415-21-510-5951	Medium	7,200	4,800	12,000
N8415-21-510-5952	Large	1,920	1,280	3,200
Total				15,200

Item	Description	Unit of Issue	Destination	Firm Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
002	Mitten Insert, Extreme Cold Weather	Pair	Edmonton	3,200	\$ _____
			Montreal	4,800	\$ _____

SIZE ROLL

NSN	Size	Destination (pair)		Total
		Montreal	Edmonton	
8415-21-5105961	Medium	4,800	3,200	8,000
Total				8,000

OPTION 1

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, to Edmonton and/or Montreal, Transportation costs included, Applicable taxes extra
003	Mitten Shell, Extreme Cold Weather	Up to a maximum of 15,200	Pair	\$ _____

**Size roll to be provided when option is exercised.*

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, to Edmonton and/or Montreal, Transportation costs included, Applicable taxes extra
004	Mitten Insert, Extreme Cold Weather	Up to a maximum of 8,000	Pair	\$ _____

OPTION 2

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, to Edmonton and/or Montreal, Transportation costs included, Applicable taxes extra
005	Mitten Shell, Extreme Cold Weather	Up to a maximum of 15,200	Pair	\$ _____

**Size roll to be provided when option is exercised.*

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, to Edmonton and/or Montreal, Transportation costs included, Applicable taxes extra
006	Mitten Insert, Extreme Cold Weather	Up to a maximum of 8,000	Pair	\$ _____

OPTION 3

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, to Edmonton and/or Montreal, Transportation costs included, Applicable taxes extra
007	Mitten Shell, Extreme Cold Weather	Up to a maximum of 15,200	Pair	\$ _____

**Size roll to be provided when option is exercised.*

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, to Edmonton and/or Montreal, Transportation costs included, Applicable taxes extra
008	Mitten Insert, Extreme Cold Weather	Up to a maximum of 8,000	Pair	\$ _____

4. OPTION QUANTITIES - Identified as Items 003, 004,005, 006, 007 & 008

The Contractor grants to Canada the irrevocable option to acquire the goods described under items 003, 004,005, 006, 007 & 008 and under the same terms and conditions and at the prices stated in the Contract. The option may only be exercised by the Contracting Authority for a minimum of 50% of the firm quantity up to a maximum of 100% of the firm quantity distributed amongst the items and destinations and will be evidenced through a contract amendment.

Option 1 (Items 003 & 004):

The Contracting Authority may exercise the option within **24 months** after contract award date by sending a written notice to the Contractor.

Option 2 (Items 005 & 006):

The Contracting Authority may exercise the option within **36 months** after contract award date by sending a written notice to the Contractor.

Option 3 (Items 007 & 008):

The Contracting Authority may exercise the option within **48 months** after contract award date by sending a written notice to the Contractor.

Multiple amendments may result. Only one amendment may be issued to exercise each option.

A size roll will be provided if and when the option is exercised.

Delivery times of the option quantities will be negotiated at the time that the option is exercised and shall not exceed 6 months from the date that the contract amendment is issued by the Contracting Authority to exercise the option. Deliveries of any option quantities will be made concurrently with the firm contract quantity and must not change the firm quantity delivery schedule.

5. USAGE OF GOVERNMENT-SUPPLIED MATERIAL

Government-supplied Material (GSM) must be used in the manufacture of the items. Material required in addition to that estimated below must be purchased from Canada at the price indicated.

Canada will provide to the Contractor the GSM free of charge, including transportation to the following address: _____.

Partial shipment of the GSM will be made to the Contractor for the pre-production samples. The balance of the GSM for the production will be forwarded to the Contractor upon the date of the written notice of approval of the pre-production samples.

Description	Item #	Quantity per Unit	Unit Price *	Minimum Width
Cloth, Nylon Taffeta 84 g/m2 (colour: Olive Green)	NSN# 8305-21-874-1049	_____ m	\$3.42 meter	150 cm
Cloth, Wool, Single Face 630 g/m2 (colour: natural)	NSN# 8305-21-874-1016	_____ m	\$18.50 meter	140 cm

*Applicable Taxes extra