



National Defence

Défense nationale

National Defence Headquarters  
Ottawa, Ontario  
K1A 0K2

Quartier général de la Défense nationale  
Ottawa (Ontario)  
K1A 0K2

## REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À :

[Steve.Lamy@forces.gc.ca](mailto:Steve.Lamy@forces.gc.ca)

### Proposal To: National Defence 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 and services listed herein and on any attached sheets at the price(s) set out therefore.

### Proposition à : Défense nationale 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 et services énumérés ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

### Solicitation Closes – L'invitation prend fin

At – à :

2:00PM DST

On - le : 8 April 2022

Title/Titre HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW)	Solicitation No – N° de l'invitation W8486-228407/A
Date of Solicitation – Date de l'invitation 7 February 2022	
Address Enquiries to – Adresser toutes questions à  Steve Lamy  <a href="mailto:Steve.Lamy@forces.gc.ca">Steve.Lamy@forces.gc.ca</a>	
Telephone No. – N° de téléphone 343-571-0728	FAX No – N° de fax
Destination  See Herein	

### Instructions:

**Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.**

**Instructions: Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.**

Delivery required - Livraison exigée See Herein	Delivery offered - Livraison proposée
Vendor Name and Address - Raison sociale et adresse du fournisseur  <b>Bidder to complete</b>	
Name and title of person authorized to sign on behalf of vendor (type or print) - Nom et titre de la personne autorisée à signer au nom du fournisseur (caractère d'imprimerie)	
Name/Nom _____	Title/Titre _____
Signature _____	Date _____

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Security Requirements**

There is no security requirement associated with this bid solicitation.

### **1.2 Requirement**

The requirement is detailed under the 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 Canadian Content**

The requirement is limited to Canadian goods.

### **1.5 Phased Bid Compliance Process**

The Phased Bid Compliance Process applies to this requirement.

## 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](#) (2020-05-28) Standard Instructions – Goods and Services – Competitive Requirements, are incorporated by reference into and form part of the bid solicitation, with the following modifications:

- a) Section 02, Procurement Business Number is deleted in its entirety.
- b) Section 20(2), Further Information is deleted in its entirety.
- c) Subsection 2.d. of Section 05, Submission of Bids, is deleted in its entirety and replaced with the following:

Send its bid only to the address specified in the bid solicitation.

- d) Section 06, Late Bids, Is deleted in its entirety;
- e) The text under Section 07, Delayed Bids, is deleted in its entirety and replaced with the following:

It is the Bidder's responsibility to ensure that the Contracting Authority has received the entire submission. Misrouting or other electronic delivery issues resulting in late submission of bids will not be accepted.

- f) Subsection 1 of Section 08, Transmission by facsimile or by epost Connect, is deleted in its entirety.

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services –Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 180 days

### 2.2 Electronic Submission of Bids

- a) Bids must be submitted only to the Department of National Defence by the date, time and place indicated on page 1 of the bid solicitation. Bids must be received electronically as noted in subparagraph b).
- b) **Electronic Submissions: Individual e-mails exceeding five (5) megabytes, or that includes other factors such as embedded macros and/or links, may be rejected by the DND e-mail system and/or firewall(s) without notice to the Bidder or Contracting Authority.** Larger bids may be submitted through more than one e-mail. The Contracting Authority will confirm receipt of documents. It is the Bidder's responsibility to ensure that the Contracting Authority has received the entire submission. Bidders should not assume that all documents have been received unless the Contracting Authority confirms receipt of each document. In order to minimize the potential for technical issues, Bidders are

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requested to allow sufficient time before the closing time and date to confirm receipt. Technical and financial documents received after the closing time and date will not be accepted.

### **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.

### **2.5 Technical Data / Sample(s)**

In order to receive the Technical Data Packages / sample(s) against this solicitation, Bidders must send their request by email to the Contracting Authority ([steve.lamy@forces.gc.ca](mailto:steve.lamy@forces.gc.ca)) and provide the following details:

- 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

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 / sample(s).

### **2.6 Sealed Pattern(s)/Sample(s) - Return to Sender**

The sealed pattern(s)/sample(s) which may have been sent to you, are to be returned to the sender, if you are the unsuccessful Bidder. The sealed pattern(s)/sample(s) is (are) not to be mutilated or cut, and must be returned in the same condition as sent to the Bidder.

### **2.7 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:

Sales Centre

Canadian General Standards Board

L'Esplanade Laurier Building

140 O'Connor Street

Tower East, 6th floor

Ottawa, ON

K1A 0S5

Telephone: 1-800-665-2472

E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)

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

## **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: (electronic copy via email);  
Section II: Financial Bid: (electronic copy via email);  
Section III: Certifications: (electronic copy via email); and  
Section IV: Additional Information: (electronic copy via email).

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

Canada requests that Bidders use a numbering system that corresponds to the bid solicitation.

Bidders may use Attachment 1 to Part 3 Financial Bid to indicate their prices. If Bidders choose to use Attachment 1 to Part 3 Financial Bid to indicate their prices, Bidders must include Attachment 1 to Part 3 Financial Bid in their financial bid.

### **3.2 Section I: Technical Bid**

Bidders must provide Test Reports, Certificates of Compliance and pre-award samples in accordance with Annex H.

Bidders must submit a shipping document in PDF format by e-mail to the Contracting Authority indicating the date that the physical samples were shipped out to the address at Para 4.1.2.2. The physical samples must be received before the solicitation deadline.

### **3.3 Section II: Financial Bid**

Bidders must submit their financial bid as follows:

Bidders must submit firm unit pricing for all items, including options quantities, in accordance with Appendix 1 of Annex A, Delivered Duty Paid (DDP) at Montreal QC and Edmonton AB, Incoterms 2010, Applicable Taxes excluded. The total amount of Applicable Taxes must be shown separately.

Bids must be submitted in Canadian dollars.

#### **3.3.1 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Attachment 2 to Part 3 Electronic Payment Instruments, to identify which ones are accepted.

If Attachment 2 to Part 3 Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

#### **3.3.2 Exchange Rate Fluctuation**

SACC *Manual* clause [C3011T](#) (2013-11-06), Exchange Rate Fluctuation



### **3.4 Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5.

### **3.5 Section IV: Additional Information**

#### **3.5.1 Origin of work**

*Note to Bidders: this section applies only to manufacturers and subcontractor that will be doing a portion of the work, not manufacturers and suppliers of fabric, trim and accessories.*

Bidders must provide the name, address and country of manufacturers of the Item(s), including subcontractors, to be utilized in the performance of the contract.

The following manufacturer(s)/subcontractor(s) will be utilized in the performance of the contract:

- a. Name and complete address of manufacturer/subcontractor: \_\_\_\_\_
- b. Location where work will be \_\_\_\_\_ *(please indicate the complete address if different from the address provided in para a.)*
- c. Nature of manufacturing/subcontracting work performed: \_\_\_\_\_ *(Enter the information for each manufacturer/subcontractor)*

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

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

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.

#### **3.5.2 Resulting Contract Information**

Bidder input is required to complete several sections under Part 6, Resulting Contract Clauses.

## **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.
- (c) Canada will use the Phased Bid Compliance Process (PBCP) described below.

#### **4.1.1 Phased Bid Compliance Process**

##### **4.1.1.1 (2018-07-19) General**

- (a) Canada is conducting the PBCP described below for this requirement.
- (b) Notwithstanding any review by Canada at Phase I or II of the PBCP, Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada.

THE BIDDER ACKNOWLEDGES THAT THE REVIEWS IN PHASE I AND II OF THIS PBCP ARE PRELIMINARY AND DO NOT PRECLUDE A FINDING IN PHASE III THAT THE BID IS NON-RESPONSIVE, EVEN FOR MANDATORY REQUIREMENTS WHICH WERE SUBJECT TO REVIEW IN PHASE I OR II AND NOTWITHSTANDING THAT THE BID HAD BEEN FOUND RESPONSIVE IN SUCH EARLIER PHASE. CANADA MAY DEEM A BID TO BE NON-RESPONSIVE TO A MANDATORY REQUIREMENT AT ANY PHASE.

THE BIDDER ALSO ACKNOWLEDGES THAT ITS RESPONSE TO A NOTICE OR A COMPLIANCE ASSESSMENT REPORT (CAR) (EACH DEFINED BELOW) IN PHASE I OR II MAY NOT BE SUCCESSFUL IN RENDERING ITS BID RESPONSIVE TO THE MANDATORY REQUIREMENTS THAT ARE THE SUBJECT OF THE NOTICE OR CAR, AND MAY RENDER ITS BID NON-RESPONSIVE TO OTHER MANDATORY REQUIREMENTS.

- (c) Canada may, in its discretion, request and accept at any time from a Bidder and consider as part of the Bid, any information to correct errors or deficiencies in the Bid that are clerical or administrative, such as, without limitation, failure to sign the Bid or any part or to checkmark a box in a form, or other failure of format or form or failure to acknowledge; failure to provide a procurement business number or contact information such as names, addresses and telephone numbers; inadvertent errors in numbers or calculations that do not change the amount the Bidder has specified as the price or of any component thereof that is subject to evaluation. This shall not limit Canada's right to request or accept any information after the bid solicitation closing in circumstances where the bid solicitation expressly provides for this right. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive.
- (d) The PBCP does not limit Canada's rights under Standard Acquisition Clauses and Conditions (SACC) 2003 (2020-05-28) Standard Instructions – Goods or Services – Competitive Requirements nor Canada's right to request or accept any information during the solicitation period or after bid solicitation closing in circumstances where the bid solicitation expressly provides for this right, or in the circumstances described in subsection (c).
- (e) Canada will send any Notice or CAR by any method Canada chooses, in its absolute discretion.

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The Bidder must submit its response by the method stipulated in the Notice or CAR. Responses are deemed to be received by Canada at the date and time they are delivered to Canada by the method and at the address specified in the Notice or CAR. An email response permitted by the Notice or CAR is deemed received by Canada on the date and time it is received in Canada's email inbox at Canada's email address specified in the Notice or CAR. A Notice or CAR sent by Canada to the Bidder at any address provided by the Bidder in or pursuant to the Bid is deemed received by the Bidder on the date it is sent by Canada. Canada is not responsible for late receipt by Canada of a response, however caused.

#### **4.1.1.2 (2018-03-13) Phase I: Financial Bid**

(a) After the closing date and time of this bid solicitation, Canada will examine the Bid to determine whether it includes a Financial Bid and whether any Financial Bid includes all information required by the solicitation. Canada's review in Phase I will be limited to identifying whether any information that is required under the bid solicitation to be included in the Financial Bid is missing from the Financial Bid. This review will not assess whether the Financial Bid meets any standard or is responsive to all solicitation requirements.

(b) Canada's review in Phase I will be performed by officials of the Department of National Defence.

(c) If Canada determines, in its absolute discretion that there is no Financial Bid or that the Financial Bid is missing all of the information required by the bid solicitation to be included in the Financial Bid, then the Bid will be considered non-responsive and will be given no further consideration.

(d) For Bids other than those described in c), Canada will send a written notice to the Bidder ("Notice") identifying where the Financial Bid is missing information. A Bidder, whose Financial Bid has been found responsive to the requirements that are reviewed at Phase I, will not receive a Notice. Such Bidders shall not be entitled to submit any additional information in respect of their Financial Bid.

(e) The Bidders who have been sent a Notice shall have the time period specified in the Notice (the "Remedy Period") to remedy the matters identified in the Notice by providing to Canada, in writing, additional information or clarification in response to the Notice. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the Notice.

(f) In its response to the Notice, the Bidder will be entitled to remedy only that part of its Financial Bid which is identified in the Notice. For instance, where the Notice states that a required line item has been left blank, only the missing information may be added to the Financial Bid, except that, in those instances where the addition of such information will necessarily result in a change to other calculations previously submitted in its Financial Bid, (for example, the calculation to determine a total price), such necessary adjustments shall be identified by the Bidder and only these adjustments shall be made. All submitted information must comply with the requirements of this solicitation.

(g) Any other changes to the Financial Bid submitted by the Bidder will be considered to be new information and will be disregarded. There will be no change permitted to any other Section of the Bidder's Bid. Information submitted in accordance with the requirements of this solicitation in response to the Notice will replace, in full, **only** that part of the original Financial Bid as is permitted above, and will be used for the remainder of the bid evaluation process.

(h) Canada will determine whether the Financial Bid is responsive to the requirements reviewed at Phase I, considering such additional information or clarification as may have been provided by the Bidder in accordance with this Section. If the Financial Bid is not found responsive for the requirements reviewed at Phase I to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.

(i) Only Bids found responsive to the requirements reviewed in Phase I to the satisfaction of Canada, will receive a Phase II review.

#### **4.1.1.3 (2018-03-13) Phase II: Technical Bid**

(a) Canada's review at Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criterion. This review will not assess whether the Technical Bid meets any standard or is responsive to all solicitation requirements. Eligible Mandatory Criteria are all mandatory technical criteria that are identified in this solicitation as being subject to the PBCP. Mandatory technical criteria that are not identified in the solicitation as being subject to the PBCP, will not be evaluated until Phase III.

(b) Canada will send a written notice to the Bidder (Compliance Assessment Report or "CAR") identifying any Eligible Mandatory Criteria that the Bid has failed to meet. A Bidder whose Bid has been found responsive to the requirements that are reviewed at Phase II will receive a CAR that states that its Bid has been found responsive to the requirements reviewed at Phase II. Such Bidder shall not be entitled to submit any response to the CAR.

(c) A Bidder shall have the period specified in the CAR (the "Remedy Period") to remedy the failure to meet any Eligible Mandatory Criterion identified in the CAR by providing to Canada in writing additional or different information or clarification in response to the CAR. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the CAR.

(d) The Bidder's response must address only the Eligible Mandatory Criteria listed in the CAR as not having been achieved, and must include only such information as is necessary to achieve such compliance. Any additional information provided by the Bidder which is not necessary to achieve such compliance will not be considered by Canada, except that, in those instances where such a response to the Eligible Mandatory Criteria specified in the CAR will necessarily result in a consequential change to other parts of the Bid, the Bidder shall identify such additional changes, provided that its response must not include any change to the Financial Bid.

(e) The Bidder's response to the CAR should identify in each case the Eligible Mandatory Criterion in the CAR to which it is responding, including identifying in the corresponding section of the original Bid, the wording of the proposed change to that section, and the wording and location in the Bid of any other consequential changes that necessarily result from such change. In respect of any such consequential change, the Bidder must include a rationale explaining why such consequential change is a necessary result of the change proposed to meet the Eligible Mandatory Criterion. It is not up to Canada to revise the Bidder's Bid, and failure of the Bidder to do so in accordance with this subparagraph is at the Bidder's own risk. All submitted information must comply with the requirements of this solicitation.

(f) Any changes to the Bid submitted by the Bidder other than as permitted in this solicitation, will be considered to be new information and will be disregarded. Information submitted in accordance with the requirements of this solicitation in response to the CAR will replace, in full, **only** that part of the original Bid as is permitted in this Section.

(g) Additional or different information submitted during Phase II permitted by this section will be considered as included in the Bid, but will be considered by Canada in the evaluation of the Bid at Phase II only for the purpose of determining whether the Bid meets the Eligible Mandatory Criteria. It will not be used at any Phase of the evaluation to increase any score that the original Bid would achieve without the benefit of such additional or different information. For instance, an Eligible Mandatory Criterion that requires a mandatory minimum number of points to achieve compliance will be assessed at Phase II to determine whether such mandatory minimum score would be achieved with such additional or different information submitted by the Bidder in response to the CAR. If so, the Bid will be considered responsive in respect of such Eligible Mandatory Criterion, and the additional or different information submitted by the Bidder shall bind the Bidder as part of its Bid, but the Bidder's original score, which was less than the mandatory minimum for such Eligible Mandatory Criterion, will not change, and it will be that original score that is used to calculate any score for the Bid

(h) Canada will determine whether the Bid is responsive for the requirements reviewed at Phase II, considering such additional or different information or clarification as may have been provided by the Bidder in accordance with this Section. If the Bid is not found responsive for the requirements reviewed at Phase II to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.

(i) Only Bids found responsive to the requirements reviewed in Phase II to the satisfaction of Canada, will receive a Phase III evaluation.

#### **4.1.1.4 (2018-03-13) Phase III: Final Evaluation of the Bid**

(a) In Phase III, Canada will complete the evaluation of all Bids found responsive to the requirements reviewed at Phase II. Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.

(b) A Bid is non-responsive and will receive no further consideration if it does not meet all mandatory evaluation criteria of the solicitation.

### **4.1.2 Technical Evaluation**

#### **4.1.2.1 Mandatory Technical Criteria**

The Mandatory Technical Criteria that will be subject to the Phase II of the Phased Bid Compliance Process (PBCP), i.e. the Eligible Mandatory Criterion, as outlined in section 4.1.1.3 are:

##### **a) The Submission and Completeness of the Certificates of Compliance and Test Reports**

Canada will examine the bid to determine if the above-mentioned supporting documentation has been submitted. If the documentation have been submitted, Canada will review each document to determine whether or not it includes all the information required in its definition, if applicable. The submission and completeness of each supporting documentation will be subject to the Phase II of the Phased Bid Compliance Process. However, the evaluation of each supporting document to determine if the said supporting document meet the technical requirements will be done at Phase III of the PBCP.

##### **b) The Submission of the Pre-Award Samples:**

Canada will examine the bid to determine if the Pre-Award Samples (PAS) have been submitted. However, the evaluation of the PAS to determine if the PAS meet the technical requirements will be done at Phase III of the PBCP.

#### **4.1.2.2 Pre-Award Sample(s) and Supporting Documentation**

As part of the technical evaluation, to confirm a Bidder's capability of meeting the technical requirements, pre-award samples, test results and certificates of compliance as per Annex H – Bid Technical Evaluation Plan must be submitted at time of bid closing at no charge to Canada.

The samples must be sent to the following address:  
Department of National Defence Headquarters  
ADM(Mat) / DGLEPM / DLP 3-3-3  
NPB, 2-2E19  
101 Colonel By Drive Ottawa ON  
K1A 0K2

The Bidder must ensure that the following information is clearly printed or typed on all pre-award samples or on its packaging:

- a. Solicitation Number;
- b. Name of Bidder; and
- c. Solicitation Closing Date and Time.

The test results and certificates of compliance must be sent electronically with the bid.

Failure to submit the required pre-award samples and supporting documentation 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 Bidder must ensure that the required pre-award samples are manufactured in accordance with the technical requirement and are fully representative of the bid submitted. Rejection of the pre-award samples will result in the bid being declared non-responsive.

The pre-award samples will be evaluated for quality of workmanship and conformance to specified materials and measurements as per Annex H – Bid Technical Evaluation Plan.

The requirement for pre-award samples and test results and certificates of compliance 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.

Laboratory analysis of the product offered showing test results for specific tests listed in Annex H – Bid Technical Evaluation Plan of physical properties detailed in the technical requirement must be provided with the pre-award sample. Testing must be performed by an independent accredited laboratory establishment familiar with textile related testing and must be in accordance with the test methods detailed in the technical requirement.

Testing carried out by university textile testing laboratories and NATO member nation government laboratories will also be acceptable. Should a non-accredited laboratory be required for specific tests, approval must be sought and received in writing from the Contracting Authority in advance.

The laboratory report and test results must be dated within eighteen (18) months of the Request for Proposal posting date.

In addition, Certificate of Compliance as detailed in Annex H – Bid Technical Evaluation Plan is required as defined herein. The certificate of compliance must be dated a maximum of twelve (12) months before the Request for Proposal posting date OR within the posting date of the solicitation.

All testing and test methods must be in accordance with the reference criteria detailed in Annex H. Test specimens must be sampled using best practices (for example, textiles taken from the same sample of cloth, conditioned and selected at random from each lot, etc.).

#### **4.1.2.3 CERTIFICATE OF COMPLIANCE – DEFINITION**

A Certificate of Compliance (C of C) is a written statement from the supplier guaranteeing the full compliance of the product or raw material to demonstrate technical and performance information.

Each Certificate of Compliance:

- a. Must be on official company stationary;
- b. Must be current; the document must be dated within two (2) years of the Request for Proposal posting date. All reported test measurements must have been performed no more than one (1) year before the Request for Proposal posting date;
- c. Must include a statement to the effect that the referenced product complies with the referenced criteria. The criteria that the product are certified to comply with must be included;
- d. Must identify the supplier's part number / reference number of the product being certified. When certifying product lots, the document must also include the lot number;
- e. Must include the name and contact information of the company's designated representative; and
- f. A complete Test Report will be accepted in lieu of a Certificate of Compliance (C of C), if the test results demonstrate compliance with the applicable criteria.

Canada reserves the right to verify the statements made in the C of C. Canada reserves the right to carry out testing of any specified property in order to confirm the compliance of the end item or material components with the applicable specification(s).

#### **4.1.3 Financial Evaluation**

The price of the bid will be evaluated in Canadian dollars, Delivered Duty Paid (DDP) at Montreal QC and Edmonton AB, Incoterms 2010, Canadian customs duties and excise taxes included, Applicable Taxes excluded.

#### **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).

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## 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. Unless otherwise specified, 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 Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

#### 5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

### 5.2 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 provided will render the bid non-responsive.

#### 5.2.1 Integrity Provisions – Required Documentation

In accordance with the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

#### 5.2.2 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" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969#afed) website ([http://www.esdc.gc.ca/en/jobs/workplace/human\\_rights/employment\\_equity/federal\\_contractor\\_program.page?&\\_ga=1.229006812.1158694905.1413548969#afed](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969#afed)).

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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.



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The Bidder must provide the Contracting Authority with a completed annex [Federal Contractors Program for Employment Equity - Certification](#), before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

### 5.2.3 Additional Certifications Precedent to Contract Award

#### 5.2.3.1 Canadian Content Certification

SACC Manual clause [A3050T](#) (2020-07-01) Canadian Content Definition

##### Rules of Origin - Textiles

With reference to the Canadian Content Certification clause, item(s) on this solicitation are considered to be Canadian goods if they meet the following definition:

**MODIFIED RULE OF ORIGIN FOR TEXTILES:** "Textiles and textile articles classified in Chapters 50 to 60 inclusive of the Harmonized System that are woven, knitted or otherwise manufactured from yarns or fibres in Canada, and further processed in Canada by dyeing, finishing, coating or other processes as applicable, will be considered Canadian textiles. Woven fabrics of 100% cotton or of polyester and cotton blends that are dyed and finished in Canada will be considered Canadian."

##### Canadian Content Certification

This procurement is limited to Canadian goods.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the good(s) offered are Canadian goods, as defined in clause A3050T, may be considered.

Failure to provide this certification completed with the bid will result in the good(s) offered being treated as non-Canadian goods.

*Note to bidders, please complete this section*

The Bidder certifies that:

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

*Note to bidders, please complete this section*

##### Plant Location

Items will be manufactured at: \_\_\_\_\_

#### 5.2.3.2 Sample(s) and Production Certification

*Note to bidders, please complete this section*

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.

### 5.2.4 Ethical Procurement Certification

The ethical considerations for procurement of apparel certification document attached to this solicitation at Attachment 4 to Part 5 is incorporated by reference into, and forms a binding part of the bid solicitation. The Bidder must comply with the certification.

By submitting a bid in response to this bid solicitation, the Bidder certifies that:

a. it has read and understands the certification attached to this solicitation;

- b. it understands that the eight fundamental human and labour rights laid out in the certification document must be complied with or the bid may be declared non-responsive, or Canada may terminate any resulting contract for default.

## **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**

There is no security requirement applicable to this Contract.

### **6.2 Requirement**

The Contractor must provide the Department of National Defence (DND) with Hat, Sun, Temperate Weather, Combat, CADPAT™, in accordance with Annex "A".

### **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 (2021-12-02), General Conditions - Goods (Higher Complexity), apply to and form part of the Contract, with the following modifications:

a. Definition of Minister is modified as follows:

"Canada", "Crown", "Her Majesty" or "the Government" means Her Majesty the Queen in right of Canada as represented by the Minister of National Defence and any other person duly authorized to act on behalf of that minister or, if applicable, an appropriate minister to whom the Minister of National Defence has delegated his or her powers, duties or functions and any other person duly authorized to act on behalf of that minister.

### **6.4 Term of Contract**

#### **6.4.1 Delivery Date**

##### **Delivery - Firm Quantity - Phased**

The first delivery must be made within 60 calendar days from the date of the written notice of approval of pre-production samples. The quantity delivered must be 300 units. The balance must be delivered at the rate of 600 units weekly after the first delivery until completion of the Contract.

##### **Delivery - Option Quantity**

The delivery of the option quantity must commence within 60 calendar days from receipt of the contract amendment and after final delivery of the contract quantity. The quantity delivered must be 300 units. The balance must be shipped at a rate of 600 units weekly after the first delivery until completion of the option quantity.

#### **6.4.2 Option to Extend the Contract**

The Contractor grants to Canada the irrevocable options to acquire the goods described under Appendix 1 of Annex A of the Contract under the same conditions and at the prices stated in the Contract.

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The options may only be exercised by the Contracting Authority for a minimum of 25% of the total maximum quantity per amendment, and up to 100% of the total maximum quantity for all amendments in total and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the options within 60 months after contract award by sending a written notice to the Contractor.

Multiple amendments may result.

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

### **6.4.3 Shipping Instructions**

Goods must be consigned and delivered to the destination specified in the contract:

1. Incoterms 2010 "DDP Delivered Duty Paid" Montreal QC and Edmonton AB.
2. The Contractor must deliver the goods 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  
Telephone: 780-973-4011, ext. 4524  
E-mail: [Edm7CFSDNMDS@forces.gc.ca](mailto:Edm7CFSDNMDS@forces.gc.ca)
  - b) 25 CF Supply Depot Montreal, Montreal, Qué.  
Telephone: 514-252-2777, ext. 2363  
E-mail: [25DAFCTrafficRDV@forces.gc.ca](mailto:25DAFCTrafficRDV@forces.gc.ca)

## **6.5 Authorities**

### **6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Steeve Lamy  
DLP 3-3-3  
Materiel Acquisition and Support Specialist  
Department of National Defence  
Assistant Deputy Minister Materiel  
Director General Land Equipment Program Management  
101 Colonel By Drive  
Ottawa ON K1A 0K2  
Telephone: 343-571-0728  
E-mail address: [steeve.lamy@forces.gc.ca](mailto:steeve.lamy@forces.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**

*Will be inserted at contract award*

The Technical Authority for the Contract is:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Department of National Defence

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Assistant Deputy Minister Materiel  
Director General Land Equipment Program Management  
Address: 101 Colonel By Drive  
Ottawa ON K1A 0K2  
Telephone: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

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**

*Note to bidders, please complete this section*

#### **General enquiries**

Name:  
Telephone No.  
E-mail address:

#### **Delivery follow-up**

Name:  
Telephone No.  
E-mail address:

### **6.6 Payment**

#### **6.6.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in Appendix 1 of Annex "A" – Basis of Payment 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 Payment

#### **6.6.3 Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic and International);
- b. Electronic Data Interchange (EDI);
- c. Wire Transfer (International Only);

### **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.

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Each invoice must be supported by a copy of the release document and any other documents as specified in the Contract;

2. Invoices must be distributed as follows:

- a) A copy of the invoice in electronic format (PDF) to the Consignee:
  1. 25 CFSD Montreal Account Payable [25dafccontrat@forces.gc.ca](mailto:25dafccontrat@forces.gc.ca)
  2. 7 CFSD Edmonton Accounts Payable [Edm7CFSDInvoices@forces.gc.ca](mailto:Edm7CFSDInvoices@forces.gc.ca)
- b) a copy of the invoice in electronic format (PDF) to the Technical Authority.
- c) a copy of the invoice in electronic format (PDF) to the Contracting Authority.

## 6.8 Certifications and Additional Information

### 6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### 6.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### 6.8.3 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](#) (2020-05-28), General Conditions - Higher Complexity - Goods;
- c) Annex "A", Statement of Work;
- d) Annex "B", DSSPM 2-3-87-5176 Specification for Hat, Sun, Temperate Weather;
- e) Annex "C", DSSPM 2-2-80-059 Specification for Cloth, Coated, Nylon/Taffeta-Polyurethane;
- f) Annex "D", DSSPM 3-6-80-001 Specification for CADPAT;
- g) Annex "F", Pre-Production and Production Technical Validation Plan;
- h) Annex "E", CFTPO-HATS Canadian Forces Transportation and Packaging Instruction;
- i) Annex "G", Size Roll
- j) Appendix 1 of Annex "A"
- k) Sealed/Viewing Patterns/Samples

- l) the Contractor's bid dated \_\_\_\_\_, (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award.*"), as clarified on \_\_\_\_\_ " *or* ", as amended on \_\_\_\_\_ " *and insert date(s) of clarification(s) or amendment(s)*).

#### 6.11 Defence Contract

SACC Manual clause [A9006C](#) (2012-07-16) Defence Contract

#### 6.12 Insurance

SACC Manual clause [G1005C](#) (2016-01-28) Insurance

#### 6.13 Packaging Requirement

The Contractor must package items in accordance with Annex E (CFTPO-Hats). Packing must be marked in accordance with Annex E and D-LM-008-002/SF-001 (Marking for Storage and Shipment).

#### 6.14 Quality Assurance

SACC Manual clause [D5545C](#) (2019-05-30), ISO 9001:2008 – Quality Management Systems Requirement (Quality Assurance Code C)

#### 6.15 SACC Manual Clauses

[B7010C](#) (2008-05-12) Marking and Labelling  
[D2025C](#) (2017-08-17) Wood Packing Materials  
[D6010C](#) (2007-11-30) Palletization

#### 6.16 Materials: Contractor Total Supply

The Contractor will be responsible for obtaining all materials required in the manufacture of the items specified. The delivery stated for the items allows the necessary time to obtain such materials.

#### 6.17 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 to 12B the Design Change/Deviation form DND 675 and forward to the Technical Authority and 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.

#### 6.18 Plant Closing

*Note to bidders, please complete this section*

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

2022

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_  
Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

2023

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

2024

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

2025

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

2026

Summer Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

Christmas Holiday FROM \_\_\_\_\_ TO \_\_\_\_\_

### 6.19 Plant Location

*Note to bidders, please complete this section*

Items will be manufactured at: \_\_\_\_\_

### 6.20 Subcontractor(s)

*Note to bidders, please complete this section*

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.

### 6.21 Ethical Apparel

The ethical procurement certification incorporated into the bid solicitation on its closing date is incorporated into, and forms a binding part of the Contract. The Contractor must ensure continuous compliance with the provisions of the ethical procurement certification that was signed during the bidding process throughout the duration of the contract.

The origin of work clause incorporated into the bid solicitation on its closing date is incorporated into, and forms a binding part of the Contract. It is the Contractor's responsibility to ensure continuous accuracy with the origin of work information provided with their bid and must immediately inform Canada in writing of any and all changes affecting the information provided under the origin of work clause during the entire contract period. The certification is subject to verification by Canada at any given time during the period of the contract. If the certification is found to be untrue Canada may declare a bid non-responsive or may declare a contractor in default, whether made knowingly or unknowingly during the bid evaluation period or during the contract period. The continuing obligation to maintaining this certification is a material obligation of the Contract.

### 6.22 Overshipment

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



### **6.23 Pre-Production Samples**

1. The Contractor must provide pre-production samples in accordance with Annex F – Pre-Production and Production Technical Validation Plan to the Technical Authority for acceptance within 21 calendar days from date of contract award.
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 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 laboratory test reports in accordance with Annex F – Pre-Production and Production Technical Validation Plan, 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.

### **6.24 Sealed/Viewing Pattern(s)/Sample(s) - Return to Sender**

The sealed/viewing pattern/sample which may have been sent to the Contractor, is to be returned to the sender upon completion of Contract.

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



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.

RDIMS/SGDDI No. 5550383

ANNEX / ANNEXE A  
W8486-228407/A  
2021-08-06

**STATEMENT OF WORK  
FOR  
HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT  
TEMPERATE WOODLANDS (TW)  
NSN 8415-21-914-5176 A/A**

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**ENONCÉ DES TRAVAUX  
CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT  
TEMPÉRÉ (CSCCT), D<sub>Cam</sub>C<sup>MC</sup> RÉGIONS BOISÉES  
TEMPÉRÉES (RBT)  
NNO 8415-21-914-5176 A/A**

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OPI/BPR: DSSPM / DAPES 2-3

**Statement of Work  
For  
Hats, Sun, Temperate Weather, Combat,  
CADPAT™ Temperate Woodlands (TW)  
NSN 8415-21-914-5176 A/A**

**Énoncé des travaux  
Pour  
Chapeaux de Soleil de Combat Pour Climat  
Tempéré, DCamC<sup>MC</sup> Régions Boisées  
Tempérées (RBT)  
NNO 8415-21-914-5176 A/A**

**1. SCOPE**

**1.1. Objective.** The Department of National Defence's Directorate Soldier Systems Program Management (DSSPM) has a requirement to purchase quantities of the Hats, Sun, Temperate Weather, Combat, CADPAT™ Temperate Woodlands (TW) for replenishment of stocks held in Canadian Armed Forces (CAF) supply depots.

**1.2 Background.** DSSPM is responsible to provide individual clothing, equipment and weapons for soldiers, sailors, and aviators of the Canadian Armed Forces (CAF) to enable the achievement of their mission domestically and on operations. DSSPM presently supports a client base of approximately 150,000 people, which includes the Canadian Army (CA), Royal Canadian Navy (RCN), and Royal Canadian Air Force (RCAF), regular and reserve force personnel, Cadets, Canadian Rangers and Junior Canadian Rangers.

**1.3 Terminology.**

**1.3.1 Acronyms.** The following acronyms are used in this Statement of Work (SOW).

CA	Canadian Army
CAF	Canadian Armed Forces
CFTPO	Canadian Forces Transportation and Packaging Order
C of C	Certificate of Compliance
DA	Design Authority
DDL	Design Data List
DND	Department of National Defence
DNDQAR	DND Quality Assurance Representative
DQA	Directorate of Quality Assurance
DSSPM	Directorate of Soldier Systems Program Management

**1. PORTÉE**

**1.1 Objectif.** La Direction – Administration du programme de l'équipement du soldat (DAPES) du ministère de la Défense nationale a besoin d'acheter des quantités des chapeaux de soleil de combat pour climat tempéré, DCamC<sup>MC</sup> Régions Boisées Tempérées (RBT) pour réapprovisionner les stocks des dépôts d'approvisionnement des Forces armées canadiennes (FAC).

**1.2. Contexte.** La DAPES a la responsabilité de fournir les vêtements, l'équipement individuel et les armes aux soldats, aux marins et aux aviateurs des Forces armées canadiennes (FAC) pour leur permettre d'accomplir leur mission au pays et dans le cadre d'opérations. Actuellement, la DAPES soutient une clientèle de base d'environ 150,000 personnes, qui comprend l'Armée canadienne (AC), la Marine royale canadienne (MRC) et l'Aviation royale canadienne (ARC), la Force régulière et la Réserve, les cadets, les Rangers canadiens et les Rangers juniors canadiens.

**1.3 Terminologie.**

**1.3.1 Acronymes.** Les acronymes suivants sont utilisés dans le présent énoncé des travaux (EDT).

AC	Armée canadienne
FAC	Forces armées canadiennes
CETFC	Commande d'Emballage pour le Transport - Forces canadiennes
C de C	Certificat de conformité
AC	Autorité de la conception
LPD	Listes Des Plans Et Dessins
MDN	Ministère de la Défense nationale
RAQDN	Représentant de l'assurance de la qualité au MDN
DAQ	Direction de l'assurance de la qualité
DAPES	Direction – Administration du programme de l'équipement du soldat

RCAF Royal Canadian Air Force  
RCN Royal Canadian Navy  
RFP Request For Proposal  
TA Technical Authority

ARC Aviation royale canadienne  
MRC Marine royale canadienne  
DP Demande de propositions  
RT Responsable technique

## 2. REFERENCE DOCUMENTS

### 2.1. Government Documents.

2.1.1. The following documents form part of the requirement for the Hats, Sun, Temperate Weather, Combat, CADPAT Temperate Woodlands (TW). The documents will be provided by Canada as part of the Design Data List (DDL). Additional copies may be obtained from the address listed.

**Department of National Defence (NDHQ)**  
**Major General George R. Pearkes Building**  
**101 Colonel By Drive**  
**Ottawa, Ontario K1A 0K2**  
**Attention: DSCO 4-7-5.**

## SPECIFICATIONS AND STANDARDS

D-LM-008-002/SF-001 Marking For Storage and Shipment

D-02-006-008/SG-001 Design Change, Deviation and Waiver Procedure

## FORMS

DND 672 Design Change/Deviation

DND 675 Request for Waiver or Deviation

2.1.2 **Annexes.** The documents listed below will be provided by Canada as Annexes to this Statement of Work (SOW).

Annex B DSSPM 2-3-87-5176  
Specification for Hat,  
Sun, Temperate Weather,  
Combat, CADPAT  
Temperate Woodlands  
(TW)

## 2. DOCUMENTS DE RÉFÉRENCE

### 2.1. Documents du gouvernement.

2.1.1. Les documents suivants font partie des exigences relatives aux chapeaux de soleil de combat pour climat tempéré, D<sup>Cam</sup> Régions Boisées Tempérées (RBT). Les documents seront fournis par Canada dans le cadre de la Listes Des Plans Et Dessins (LPD). Des exemplaires supplémentaires peuvent être obtenus à l'adresse indiquée.

**Ministère de la défense nationale (QGDN)**  
**Édifice Mgén George R. Pearkes**  
**101, promenade Colonel By**  
**Ottawa (Ontario) K1A 0K2**  
**À l'attention de: DOCA 4-7-5**

## SPÉCIFICATIONS ET NORMES

D-LM-008-002/SF-001 Marquage des Articles à Entreposer ou à Expédier

D-02-006-008/SG-001 Design Change, Deviation and Waiver Procedure

## FORMS

DND 672 Modification Ou Modèle Ou Écart Autorisé

DND 675 Demande D'exemption Ou Déviation

2.1.2 **Annexes.** Les documents énumérés ci-dessous seront fournis par le Canada en annexe au présent énoncé des travaux (EDT).

Annexe B DAPES 2-3-87-5176  
Spécification Pour  
Chapeau De Soleil De  
Combat Climat  
Tempéré, D<sup>Cam</sup>  
Régions Boisées  
Tempérées (RBT)

Annex C	DSSPM 2-2-80-059 Specification for Cloth, Coated, Nylon/Taffeta- Polyurethane	Annexe C	DSSPM 2-2-80-059 Spécification Pour Tissu, Enduit, Taffetas, Nylon, Polyuréthane
Annex D	Specification for CADPAT™ [Canadian Disruptive Pattern]	Annexe D	Spécification pour DCam <sup>MC</sup> [Dessin De Camouflage Canadien]
Annex E	CFTPO-HATS Canadian Forces Transportation and Packaging Instruction	Annexe E	CETFC-CHAPEAU Commande d'Emballage pour le Transport – Forces canadiennes
Annex F	Pre-Production and Production Technical Validation Plan	Annexe F	Plan de validation technique de pré- production et de production
Annex G	Size Roll	Annexe G	Distribution De Taille

### 3.0 REQUIREMENTS

**3.1 Scope of Work.** DND requires the production of Hats, Sun, Temperate Weather, Combat, CADPAT Temperate Woodlands (TW) and their subsequent delivery in the appropriate sizes and quantities, to the locations identified in the accordance with the documents identified at paragraph 2.1.

### 4.0 DELIVERABLES.

**4.1** To support the procurement of the Hats, Sun, Temperate Weather, Combat, CADPAT Temperate Woodlands (TW), Canada requires the following deliverables.

**4.2 Pre-Production.** The Contractor must deliver the physical examples, documentation and test results as identified in **Annex F** (Pre-Production and Production Technical Validation Plan).

### 4.3 Production.

**4.3.1** The Contractor must deliver quantities of Hats, Sun, Temperate Weather, Combat, CADPAT™ Temperate Woodlands (TW) in accordance with **Annex G** (Size Roll).

### 3.0 REQUIREMENTS

**3.1 Portée des travaux.** Le MDN requiert la production de chapeaux de soleil de combat pour climat tempéré, DCam<sup>MC</sup> Régions Boisées Tempérées (RBT), puis de leur livraison subséquente, dans les pointures et les quantités spécifiées, aux endroits indiqués et conformes aux spécifications expliquées en détail au paragraphe 2.1.

### 4.0. PRODUITS LIVRABLES.

**4.1** En appui à l'acquisition des chapeaux de soleil de combat pour climat tempéré, DCam<sup>MC</sup> Régions Boisées Tempérées (RBT), Le Canada a besoin des produits livrables suivants :

**4.2 Présérie.** Les exemples physiques, les autres documents et les résultats d'essai doivent être soumis tels qu'ils sont indiqués à **l'annexe F** (Plan de validation technique de pré-production et de production).

### 4.3 Production.

**4.3.1** L'entrepreneur doit livrer des quantités fermes des chapeaux de soleil de combat pour climat tempéré, DCam<sup>MC</sup> Régions Boisées Tempérées (RBT) conformément à **l'annexe G** (Distribution de taille).

**4.3.2** If there are changes in component material supplier(s) during production, the Contractor must deliver new test results as outlined in **Annex F** (Pre-Production and Production Technical Validation Plan) to the Technical Authority. Contact information for TA will be as detailed in the Contract.

**4.3.3 Changes in Colour.** Canada reserves the right to request changes in colour for all or partial quantities of any Option exercised. Canada will define technical requirements and fund any testing required to verify that changes comply with the technical requirements.

**4.3.4 Option Quantities and Periods.** Option quantities and periods are detailed in the Contract. Options will be exercised on an as requested basis.

**4.3.5** Canada reserves the right to request additional testing and physical examples during production.

## **5. PACKAGING.**

**5.1** Packaging and packing for deliverables must be in accordance with the terms of the contract and **Annex E** (CFPTO-HATS).

**5.2 Marking.** Packing must be marked in accordance with **D-LM-008-002/SF-001** (Marking for Storage and Shipment), and/or **Annex E**.

## **6 FORMAT AND DOCUMENT REQUIREMENTS.**

**6.1** Technical documents must be delivered in accordance with the following requirements.

**6.1.1** Technical / documentary deliverables must be clearly identified or labelled as the deliverable pertaining to a particular criterion.

**6.1.2** Documents must be written in English or French.

**4.3.2** S'il y a des changements de fournisseur(s) de composants pendant la production, l'entrepreneur doit fournir de nouveaux résultats d'essai, comme indiqué à l'**annexe F** (plan de validation technique de préserie et de production) au responsable technique. Les coordonnées du responsable technique seront indiquées dans le contrat.

**4.3.3 Changements de couleur.** Le Canada se réserve le droit de demander des changements de couleur pour tout ou partie des quantités de toute option exercée. Le Canada définira les exigences techniques et financera tous les essais nécessaires pour vérifier que les changements sont conformes aux exigences techniques.

**4.3.4. Quantités et périodes optionnelles.** Les quantités et les périodes optionnelles sont expliquées en détail dans le contrat. Les options seront exercées sur demande.

**4.3.5.** Le gouvernement du Canada se réserve le droit de demander des essais supplémentaires et des échantillons physiques pendant l'étape de production.

## **5. EMBALLAGE.**

**5.1** L'emballage et l'enveloppement des produits livrables doivent être conformes aux conditions du contrat et **Annexe E** (à la norme CETFC-CHAPEAU).

**5.2 Marquage.** Les emballages doivent être marqués conformément à **la norme D-LM-008-002/SF-001** (Marquage des Articles à Entreposer ou à Expédier) et / ou l'**Annexe E**.

## **6. EXIGENCES RELATIVES À LA PRÉSENTATION ET AUX DONNÉES.**

**6.1** Les documents techniques doivent être livrés conformément aux exigences ci-dessous.

**6.1.1** Les produits livrables techniques et/ou documentaires doivent être clairement identifiés ou étiquetés comme étant les produits livrables correspondant à un critère précis.

**6.1.2** Les documents doivent être rédigés en anglais ou en français.

**6.1.3** Unless otherwise stated, documents must be delivered in hard copy and electronically in Adobe Acrobat (.pdf).

**6.1.3** À moins d'indication contraire, les documents doivent être livrés en copie papier et en version électronique (Adobe Acrobat [.pdf]).

## **6.2 Certificates Of Compliance (CofC).**

## **6.2 Certificats De Conformité (CdeC).**

**6.2.1 Definition.** A Certificate of Compliance (C of C) is a written statement from the supplier<sup>1</sup> guaranteeing the full compliance of the product to the specification, or portion thereof, referenced.

**6.2.1 Définition.** Un certificat de conformité (CdeC) est une attestation écrite du fournisseur garantissant<sup>2</sup> l'entière conformité du produit à la spécification, ou à une partie de celle-ci, citée en référence.

**6.2.2** Each Certificate of Compliance must clearly include the following:

**6.2.2** Chaque certificat de conformité doit satisfaire aux exigences suivantes :

- a. The document must be on official company stationary;
- b. The document must be current. For pre-production, it must be dated within a maximum six (6) months before or after the main contract award date. For production, it must be dated within two (2) months of the date of Request for Design Change, Deviation, and Waiver Procedure documentation.
- c. The document must include a statement to the effect that the referenced product complies with the referenced criteria. The criteria that the product are certified to comply with must be included;
- d. The document must include a descriptive nomenclature of each type of product being certified. When certifying product lots, the descriptive nomenclature must also include the supplier name and lot number;
- e. Any terms or conditions of the products' compliance must be included in the document;
- f. All reported test measurements must have been performed no more than one (1) year before the Contract issue date;
- g. The document must include the name and contact information of the company's designated representative; and
- h. A complete Test Report will be accepted in lieu of a Certificate of Compliance (CofC),

- a. le document doit être produit sur le papier de correspondance officiel de l'entreprise;
- b. le document doit être valide;. À l'étape de pré-production, il ne doit pas être antérieur ou postérieur de plus de six (6) mois à la date d'attribution du contrat principal. À l'étape de production, il ne doit pas dépasser de plus deux (2) mois la date de la demande de modification de la conception conformément à la procédure du document « Design Change, Deviation and Waiver Procedure »;
- c. le document doit comprendre un énoncé indiquant que le ou les produits visés sont conformes aux critères cités en référence. Les critères à l'égard desquels les produits sont certifiés doivent être indiqués;
- d. le document doit comprendre une nomenclature descriptive de chaque type de produit certifié. Dans le cas de lots de produits certifiés, la nomenclature descriptive doit également comporter le nom du fournisseur et le numéro du lot;
- e. toute modalité touchant la conformité du ou des produits doit être indiquée dans le document;
- f. toutes les mesures mentionnées dans un rapport doivent avoir été prises pendant des essais qui se sont déroulés dans l'année précédant la date d'émission du contrat;

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<sup>1</sup> Definition of "supplier" is original manufacturer of the product. If the product is manufactured inhouse by the end item manufacturer, the Certificate of Compliance must state this to avoid confusion. Canada reserves the right to ask for verification

<sup>2</sup> La définition de « fournisseur » désigne le fabricant original du produit. Si le produit est fabriqué à l'interne par le fabricant de l'article final, le certificat de conformité doit l'indiquer pour éviter toute confusion. Le Canada se réserve le droit de demander une vérification

if the test results demonstrate compliance with the applicable criteria.

- g. le document doit comprendre le nom et les coordonnées de la personne-ressource du représentant désigné de l'entreprise; et
- h. un rapport d'essai complet sera accepté à la place d'un certificat de conformité si les résultats des essais démontrent la conformité aux critères applicables.

**6.2.3** Canada reserves the right to verify the statements made in the CofC. Canada reserves the right to carry out testing of any specified property in order to confirm the compliance of the end item or material components with the applicable specification(s).

**6.2.3** Le gouvernement du Canada se réserve le droit de vérifier les déclarations contenues dans le C de C. Il se réserve également le droit d'effectuer des essais afin de vérifier la conformité d'un matériau ou d'un article à une propriété particulière de la ou des spécifications pertinentes.

### **6.3 TEST REPORTS.**

### **6.3 RAPPORTS D'ESSAI.**

**6.3.1** All testing and test methods must be in accordance with the reference criteria. Test results must be applicable to the specific samples submitted.

**6.3.1** Tous les essais et toutes les méthodes d'essai doivent être conformes aux critères de référence. Les résultats des essais doivent être applicables aux échantillons précis soumis.

**6.3.2** An accredited independent laboratory familiar with textile related testing must conduct all testing unless otherwise stated. Testing carried out by university textile testing laboratories will also be acceptable. Additional information about accredited laboratories is available on the Standards Council of Canada website (<http://www.scc.ca/en/accreditation/laboratories>). Should a non-accredited laboratory be required for specific tests, approval must be sought and received in writing from the Contracting Authority in advance.

**6.3.2** À moins d'avis contraire, tous les essais effectués sur les textiles doivent être réalisés par un laboratoire accrédité indépendant ayant une bonne connaissance des essais effectués sur des textiles. Les résultats d'essais effectués par des laboratoires universitaires effectuant des essais textiles seront aussi acceptables. Des renseignements supplémentaires sur les laboratoires accrédités se trouvent dans le site Web du Conseil canadien des normes (<http://www.scc.ca/fr/accreditation/laboratoires-dessais-et-detalonnage>). Si un laboratoire non accrédité menait certains essais, il faudrait obtenir au préalable l'autorisation écrite de l'autorité contractante.

**6.3.3** All Test Reports must clearly include:

**6.3.3.** Tous les rapports d'essai doivent comprendre les renseignements détaillés suivants :

- a. Test results must be on official test laboratory stationary;
- b. Test results must be current. For pre-production testing, it must be dated maximum six (6) months before or after the main contract award date. For production testing, it must be dated within two (2) months of the date of Request for Design Change, Deviation, and Waiver Procedure documentation.
- c. Test results must specify a descriptive nomenclature for each type of test specimen including (where applicable) the production date, lot number, and a unique identifier for each test specimen;

- a. les résultats des essais doivent être produits sur le papier de correspondance officiel du laboratoire;
- b. les résultats des essais doivent être valides. Dans le cas des essais de préserie, les résultats ne doivent pas être antérieurs ou postérieurs de plus de six (6) mois à la date d'attribution du contrat. Dans le cas des essais de production, les essais ne doivent pas dépasser de plus de deux (2) mois la date de la demande de modification de la conception conformément à la procédure du



- d. Test results must make reference to the applicable test methods or specifications;
  - e. Test results must specify testing conditions/procedures followed;
  - f. The document must include the name and contact information of the supplier of each test sample, the name, contact information and signature for the primary person(s) that performed the test(s) and prepared the report, the name, contact information, and signature of the company's designated representative, and if they differ from those of the reporter's designated representative, the name and contact information of the entity that issued the report.
  - g. The date the first measurement was obtained for the reported test(s).
- c. document « Design Change, Deviation and Waiver Procedure »;
  - d. les résultats des essais doivent préciser une nomenclature descriptive de chaque type d'échantillon, y compris (le cas échéant) la date de production, le numéro de lot, et un identificateur unique pour chaque échantillon;
  - e. les résultats des essais doivent faire référence aux spécifications ou aux méthodes d'essai applicables;
  - f. les résultats des essais doivent préciser les conditions et les méthodes d'essai utilisées;
  - g. Le document doit comprendre le nom et les coordonnées du fournisseur de chaque échantillon, le nom, les coordonnées et la signature de l'auteur principal des essais et du rapport, le nom, les coordonnées et la signature du représentant désigné de l'entreprise, et s'ils sont différents de ceux du représentant désigné de l'entreprise, le nom et les coordonnées de l'organisme qui a produit le rapport;
  - h. La date de la première mesure obtenue pour l'essai ayant fait l'objet d'un rapport.

**6.3.4** Canada reserves the right to verify the statements made on the test report. Canada reserves the right to carry out testing of any specified property in order to confirm the compliance of the end item or material components with the applicable specification(s).

**6.3.4** Le Canada se réserve le droit de vérifier les affirmations faites dans le rapport d'essai. Le gouvernement du Canada se réserve également le droit d'effectuer des essais afin de vérifier la conformité d'un matériau ou d'un article à une propriété particulière de la ou des spécifications pertinentes.

## 7. DESIGN CHANGES, DEVIATIONS, AND WAIVERS

## 7. MODIFICATION, ÉCART AUTORISÉ ET EXCEPTION EN MATIÈRE DE CONCEPTION

**7.1 Procedures.** The Contractor must refer to D-02-006-008/SG-001 (Design Change, Deviation and Waiver Procedure) for instructions to complete form DND 672 (Design Change/Deviation) and form DND 675 (Request for Waiver or Deviation).

**7.1. Procédures.** L'entrepreneur doit se reporter à D 02 006 008/SG 001 (« Design Change, Deviation and Waiver Procedure » – en anglais seulement) pour obtenir des instructions pour remplir formulaire DND 672 (Modification du modèle ou écart autorisé) et formulaire DND 675 (Demande d'exception ou d'écart).

### 7.2 Design Change/Deviation.

### 7.2. Modification du modèle ou écart autorisé

**7.2.1** The Contractor must fill out Part 1 of form DND 672 and forward one (1) copy with any attachments in Adobe Acrobat file format via e-mail to the following personnel as identified in the Contract:

**7.2.1.** L'entrepreneur doit remplir la partie 1 du formulaire DND 672 et en envoyer une (1) copie en format Adobe Acrobat par voie électronique aux personnes suivantes :

- a. DND Contracting Authority (CA); and
- b. DND Technical Authority (TA) /Design Authority (DA).

- a. Autorité Contractante du MDN; et
- b. Responsable Technique (RT) et/ou Responsable de la Conception (RC) du MDN.

7.2.2. The Contractor will be authorized to proceed upon receipt of the design change/deviation form signed by the Contracting Authority.

7.2.2. L'entrepreneur sera autorisé à procéder après avoir reçu ce formulaire signé par l'autorité contractante.

**7.3. Request For Waiver or Deviation.**

**7.3 Demande d'exception ou d'écart**

7.3.1. The Contractor must fill out Parts 1 to 12 of form DND 675 and forward one (1) copy with any attachments in Adobe Acrobat file format via e-mail to the following personnel as identified in the Contract:

7.3.1 L'entrepreneur doit remplir les parties 1 à 12 du formulaire DND 675 et en envoyer une (1) copie en format Adobe Acrobat par voie électronique aux personnes suivantes :

- a. DND Contracting Authority (CA); and
- b. DND Technical Authority (TA)/ Design Authority (DA).

- a. Autorité Contractante du MDN; et
- b. Responsable Technique (RT) et/ou Responsable de la Conception (RC) du MDN.

7.3.2 The Contractor will be authorized to proceed upon receipt of the request for waiver or deviation form signed by the Contracting Authority.

7.3.2 L'entrepreneur sera autorisé à procéder après avoir reçu ce formulaire signé par l'Autorité Contractante.

7.3.3 A contract amendment will be issued to incorporate the design change/deviation or waiver / deviation in the Contract.

7.3.3. Une modification de contrat sera émise pour que la modification, l'exception ou l'écart autorisé soit inclus dans le Contrat.

**APPENDIX 1 TO ANNEX "A" REQUIREMENT**

**A.1 ADDRESSES**

<b>Destination Address</b>
Department of National Defence 25 CFSD Montreal 6363 Notre Dame St. E. Montreal, Quebec H1N 1V9
Department of National Defence 7 CFSD Edmonton 195 Ave & 82nd St., Bldg. 236 Edmonton, Alberta T5J 4J5

**A.2 DELIVERABLES**

**A.2.1 FIRM QUANTITY**

<b>Item</b>	<b>Description</b>	<b>Unit of Issue</b>	<b>Destination</b>	<b>Firm Quantity</b>	<b>Firm Unit Price in CAD, DDP, Applicable Taxes extra</b>
1	HAT, SUN, COMBAT, TEMPERATE WEATHER (CADPAT™ TW)	Each	Edmonton	6,690	\$ _____
			Montreal	10,036	\$ _____

**A.2.2 OPTION QUANTITIES**

<b>Item</b>	<b>Description</b>	<b>Unit of Issue</b>	<b>Destination</b>	<b>Optional Quantity</b>	<b>Firm Unit Price in CAD, DDP, Applicable Taxes extra*</b>			
					<b>Y1</b>	<b>Y2</b>	<b>Y3</b>	<b>Y4</b>
2	HAT, SUN, COMBAT (CADPAT™)	Each	Edmonton and/or Montreal	66,904	\$ _____	\$ _____	\$ _____	\$ _____

\*Y1 pricing applies within 24 months from Contract award.

Y2 pricing applies between 25 and 36 months from Contract award.

Y3 pricing applies between 37 and 48 months from Contract award.

Y4 pricing applies between 49 and 60 months from Contract award.



## NOTICE



This document has been examined by the Technical Authority for content and confirmed that it has no references to controlled goods.

## AVIS

Le présent document a été examiné par l'autorité technique et ne vise pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

# SPECIFICATION FOR HAT, SUN, TEMPERATE WEATHER, COMBAT (HSTW), CADPAT™ TEMPERATE WOODLANDS (TW)

**NSN 8415-21-914-5176 A/A**

**SPECIFICATION  
FOR  
HAT, SUN, TEMPERATE WEATHER,  
COMBAT (HSTW), CADPAT™ TEMPERATE WOODLANDS (TW)**

**NSN 8415-21-914-5176 A/A**

**1 SCOPE**

1.1 **Scope.** This specification covers the materials, design and construction requirements for the Hat, Sun, Temperate Weather, Combat (HSTW).

1.2 **Intended Use.** The HSTW is intended to provide soldiers with protection from sun in temperate weather conditions.

**2 APPLICABLE DOCUMENTS**

2.1 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 those in effect on the date of the invitation to tender or the contract.

**2.2 Government Documents.**

2.2.1 The documents listed below will be provided by Canada. Additional copies may be obtained from the address below:

Department of National Defence (NDHQ)  
Major General George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, Ontario K1A 0K2  
Attention: DSCO 4-7-5

**SPECIFICATIONS AND STANDARDS**

D-80-001-023/SF-001	Cloth, Twist, Nylon/Cotton, Lightweight, 170g/m <sup>2</sup>
D-80-001-028/SF-001	Cord, Plaited, Spun Synthetic Fibre, Types I and II
D-80-001-055/SF-001	Label, Clothing and Equipment

2.2.2 **Annexes.** The documents listed below will be provided by the Canada as Annexes.

Annex C	DSSPM 2-2-80-059 Cloth, Coated, Nylon/Taffeta-Polyurethane
Annex D	DSSPM 3-6-80-001 Specification for CADPAT™ [Canadian Disruptive Pattern]

Annex E

CFTPO-HATS Canadian Forces Transportation Packaging  
Order

**2.3 Other Publications.** Documents listed below as specifications are not provided by Canada and may be purchased from the sources shown:

**Canadian General Standards Board**

L'Esplanade Laurier Building  
140 O'Connor Street  
Tower East, 6th floor  
Ottawa, ON  
K1A 0S5  
Telephone: 1-800-665-2472  
E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)

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

CAN/CGSB-4.2	Textile Test Methods
CAN/CGSB-4.131-93	Cotton-Covered or Polyester-Covered Polyester Thread
CAN/CGSB-4.139-94	Polyester Staple Thread
CAN/CGSB-86.1-2003	Care Labelling of Textiles

**ISO International Standards  
International Organization for Standardization**

ISO Central Secretariat  
Chemin de Blandonnet 8  
CP 401 - 1214 Vernier, Geneva  
Switzerland  
Telephone: +41 22 749 01 11  
E-mail: [central@iso.org](mailto:central@iso.org)  
Website: <http://www.iso.org/iso/home.html>

or  
Standards Council of Canada  
600-55 Metcalfe Street  
Ottawa, Ontario  
K1P 6L5 Canada  
Telephone: 613-238-3222  
Email: [info@scc.ca](mailto:info@scc.ca)  
Website: <https://www.scc.ca/en>

ISO 4915:1991	Textiles – Stitch Types - Classification and Terminology
ISO 4916:1991	Textiles – Seam Types - Classification and Terminology

**2.4 Figures.** The following Figures are included in this document as direction for the design and measurements. Figures are not to scale.

Figure 1	Front and Back
Figure 2	Front and Back Details
Figure 3	Side View
Figure 4	Inside Details

## 2.5 Sealed Samples.

2.5.1 Sealed Samples are made available to the bidders and the contractor as a guide to production. The sealed pattern may not meet the technical requirements in all respects and must be used for guidance only during production. The sealed pattern numbers are:

DSSPM 109-99 Hat, Sun, Temperate Weather, Combat, CADPAT™ TW\*  
(provided for construction and design guidance only)

DSSPM 281-01 Canadian Average Green in CADPAT™ (TW)

2.5.2 NOTE: The following are deviations from sealed sample DSSPM 109-99. Sealed sample is provided for construction and design guidance only. The following changes have been made to the design of the HSTW.

- a. Brim width has been shortened to 1-3/4" (4.4 cm) wide;
- b. Webbing is only applied to accommodate reversible cat's eyes;
- c. Neck flap is eliminated from storage pouch; and
- d. Loop tape eliminated from sweatband.

2.6 **Paper Patterns.** Paper patterns for the manufacture of the Hat, Sun, Temperate Weather, Combat will be provided by Canada as Style Code **HSW13** and must be used to manufacture the hats.

## 2.7 Order of Precedence.

2.7.1 In the event of discrepancies between the documents referenced herein and the contents of this specification, the contents of this specification must be considered a superseding requirement.

2.7.2 In the event of inconsistency within the specification, the Contracting Authority must be contacted for clarification.

2.7.3 In the event of inconsistency in contract documents such as contract, specification, and sealed patterns, the order of precedence must be contract, specification, and sealed patterns.

2.7.4 Nothing in this document supersedes applicable laws and regulations, unless a specific exemption has been obtained.

## 3 REQUIREMENTS

3.1 **Sealed Samples.** A sealed sample will be supplied to the successful bidder. The sealed sample must constitute the standard regarding any properties not specified in the Specification.

3.2 **Definition of Product.** The Hat, Sun, Temperate Weather, Combat must be designed in accordance with Sealed Sample DSSPM 109-99 (with the exceptions outlined in para 2.5) and have the following design features:

- a. Brim around entire circumference of sidewall;
- b. Two (2) black screened vents and retention washers on each side of hat;
- c. Cord chinstrap with toggle;
- d. Concealable phosphorescent tabs (Cat's-eyes); and
- e. Webbing bar tacked at the back of the hatband for the attachment of camouflage materials.

3.2.1 Unless otherwise indicated, all components of the garment must conform to the applicable figures. Hat circumference dimensions with corresponding sizes are shown in the Scale of Measurements in Table I.

### 3.3 **Materials.**

3.3.1 **Shell Material.** The shell material must be Cloth, Twist, Nylon/Cotton, Lightweight, 170 g/m<sup>2</sup> conforming to Type I (CADPAT™ TW) of D-80-001-023/SF-001.

#### 3.3.2 **Brim Interlining Components.**

3.3.2.1 The brim interlining must consist of three layers; one layer of adhesive web, one layer of coated nylon, and one layer of stiffener.

3.3.2.1.1 **Adhesive Web.** The adhesive web must be a polyamide web having a weight of 20 g/m<sup>2</sup>. This layer of adhesive web must be in between the top layer of shell and the coated nylon.

3.3.2.1.2 **Coated Nylon.** The coated-nylon material must be cloth, coated, nylon taffeta-polyurethane conforming to DSSPM 2-2-80-059. The colour must be white.

3.3.2.1.3 **Stiffener.** The stiffener interlining must be a cross laid base, binder bonded material of 100% polyester. The colour must be white. The weight must be 115g/m<sup>2</sup> (+/- 10%). The average thickness must be 0.95 mm.

3.3.3 **Sweatband Interlining Components.** The sweatband interlinings must consist of two layers; a sweat absorption layer and a cover layer.

3.3.3.1 **Sweat Absorption Layer.** The sweat absorption layer must be a non-woven, non-fusible felt material. It must be white and must consist of polyester with an acrylic binder. The weight must be 142 g/m<sup>2</sup> (+/- 10%). The average thickness must be 1.10 mm (+/- 10%).

3.3.3.2 **Cover Layer.** The cover layer must be white and fibre content of 80 to 90% polyester and 10 to 20% rayon. The material must be 36 to 42 g/m<sup>2</sup>.

3.3.4 **Chinstrap.** The chinstrap cording must be Cord, Plaited, Spun Synthetic Fibre conforming to Type I (lightweight) of D-80-001-028/SF-001. The colour must Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01.

3.3.5 **Webbing.** The webbing must be spun polyester, double jacquard weave, 19 g/m (+/- 5%) in weight, the warp ends must be 192 warp yarns per centimetre with 19 weft yarns per



centimetre. Thickness must be 1.7mm (+/- 10%) and the width must be 9/16-inch (14.3 mm). The colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01.

**3.3.6 Screened Vents and Retention Washers.** The screened vents and retention washers must be brass and must have a dull, black, chemical finish. The screened vent must have an outside rim diameter of 9/16-inch (14.3 mm), and an outside screening diameter of 7/16-inch (11.1 mm).

**3.3.7 Toggle.** The toggle must be a black, cylindrical, round tipped, plastic type with a non-metallic tension adjustment mechanism.

**3.3.8 Thread (for Seaming and Stitching).** The thread must be polyester staple conforming to CAN/CGSB-4.139-94, Size 50, R50 TEX, or polyester, cotton-covered or polyester-covered conforming to CAN/CGSB-4.131-93 class A or B, Size 75, R50 TEX. Thread colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01.

**3.3.9 Luminescent Material.** The luminescent material must be SPOT-LITE® GLO Film, Series 4100 CLL flexible plastic-backed film with pressure sensitive acrylic adhesive and 90 pound liner. This material is available from Hanovia Incorporated (6 Evans Street, Fairfield, New Jersey 07004, Phone (973) 651-5510 or Fax (973) 651-5550)).

**3.3.10 Labels.** The label must be Type I (Label, Woven, Coated and Printed) in accordance with D-80-001-055/SF-001.

### 3.4 Cutting

**3.4.1** Hats must be cut using supplied patterns. Patterns include seam allowances but do not include make-up allowance. The contractor must be responsible for any change, which may be required for make-up allowance to suit production methods, but the design, grading, or requirements specified herein must not be changed.

**3.4.2** The shell parts of each hat must be cut in the direction of the warp as indicated on the pattern drawings.

**3.4.3** The shell parts of each hat must be cut from the same print run of material with the exception of the sweatband, the inside crown binding, and the inside pocket pieces.

### 3.5 Sewing

**3.5.1** All stitching and seams must be in accordance with ISO 4915:1991 and ISO 4916:1991.

**3.5.2** Seams must be a minimum of 3/8-inch (9.5 mm) wide unless otherwise specified.

**3.5.3** All stitching must be lockstitch Type 301 with a minimum of 9 and maximum of 11 stitches per inch (3.5-4.3 stitches/cm). The serging may be done using any of the 500 series stitches and must have a minimum of 10 cover stitches per inch (4.0 stitches/cm).

3.5.4 Bartacks must be 3/8-inch (9.5 mm) to 7/16-inch (11 mm) long with 22-24 stitches. They must not exceed a width of 3/32-inch (2.4 mm).

3.5.5 The tension of the needle and bobbin threads must be adjusted to ensure proper stitching.

### 3.6 Construction

3.6.1 **Brim Construction.** See Figure 4.

3.6.1.1 The hat brim must be constructed of the following layers from top to bottom: 1 layer of shell material on the top, 1 layer of adhesive web, 1 layer of coated nylon, 1 layer of stiffener, and 1 layer of shell on the bottom.

3.6.1.2 The top shell layer and the coated-nylon layer must be fused together with the adhesive web. All layers must be placed together so that they are flush at the outside brim edge. The brim topstitching must have lines of stitching running parallel to the circumference of the brim. The stitching must be evenly spaced at 1/4-inch (6.4 mm) +/- 1/16-inch (+/- 2 mm) and may be either separate rings or a spiral pattern.

3.6.1.3 The outside edge of the brim must be bound with bias cut shell material to a finished width of 3/8-inch (9.5 mm). The binding must have a clean finish with no raw edges exposed. The binding must start and finish at the centre back, with the turned end of the binding lapped of a minimum of 1/2-inch (12.5 mm) on the opposite end of the binding.

3.6.2 **Hatband and Sidewall Assembly.** The hatband must be applied by folding and edge stitching 1/16-inch (2 mm), +/- 1/16-inch (+/- 2 mm) the top edge of the hatband to the outside sidewall.

3.6.3 **Webbing Attachment.** The webbing must be placed on the centre back of the hat, and hatband. The hatband has a mark indicating where the webbing must be anchored. At each mark, stitch through the webbing, the hatband, and the sidewall with a straight stitch, 3 times. Stitching must not extend past webbing. Centre of the webbing must be on the centre back of the hat. Webbing must not lay flat on the band. Care must be taken to allow ease between the webbing bar tacking. There must be 1/8-inch (3.2 mm) to 1/4-inch (6.4 mm) ease allowed per loop. The phosphorescent 'Cat's-eye' assemblies must be fed onto the webbing prior to closure of the back seam.

3.6.4 **Phosphorescent Tab Loop Assemblies (Cat's Eye).** See Figure 2.

3.6.4.1 Each loop must be constructed by folding each long edge in 3/8-inch (9.5 mm). One raw end of the loop must be folded up to within 1/4-inch (6.4 mm) of the other raw end, wrong sides together. The longer end must be folded down over the other raw edge, 1/4-inch (6.4 mm). The long edges must be topstitched 1/16-inch (1.5 mm) gauge.

3.6.4.2 The phosphorescent strips must have finished dimensions of 1-inch (2.5 cm) wide by 1/2-inch (1.3 cm) long. The strips must be placed on top of the raw edges of the loops 1/8-inch (3.2 mm) from the folded edge. The phosphorescent strips must be edge stitched to the shell loops in a box formation. Thread must be tone to tone with the phosphorescent strips.

3.6.4.3 The loop must be closed by folding it in half and securely edge stitching the short ends together. The loops must finish in accordance with the dimensions shown at Figure 2. Loops must be fed onto the webbing. The loops must function such that they can be turned by hand into the desired position and not roll around the webbing freely.

3.6.4.4 The centre back seams of the inside and outside sidewalls must be stitched 3/8-inch (9.5 mm) gauge and finished with the seam allowances facing each other. The webbing ends must be secured into the centre back seam.

3.6.5 **Screened Vents Attachment.** Two screened vents must be applied to each side of the hat. They must be located in accordance with the markings on the pattern drawings. Care must be taken to affix them in accordance with the manufacturer's instructions and leaving no raw edges exposed. The vents must remain secure for the life of the hat.

3.6.6 **Inside Crown Pocket.** The raw edges of the inside pocket pieces must be turned under twice and topstitched at 1/4-inch (6.4 mm) gauge. The pocket pieces must be lapped over each other to form the inside crown.

3.6.6.1 The outer pocket edges, crown edge and top sidewall edges must be stitched together and the raw edges must be bias bound so that no raw edges are exposed.

3.6.6.2 The crown must be edge stitched through all layers from the top.

### 3.6.7 **Sweatband.**

3.6.7.1 The sweatband must consist of three layers. The outer layer must be shell material, the middle layer must be a sweat absorption interlining, and the next layer must be a cover interlining. The top edge of the shell layer must be serged and folded over the top edges of the interlinings 3/8-inch (9.5 mm). The folded edge must be edge stitched 1/16-inch (1.5 mm) gauge, catching all layers of the sweatband. The bottom edge of the shell layer must be folded over the bottom edges of the interlinings 3/8-inch (9.5 mm). The folded edge must be edge stitched 1/16-inch (2 mm) gauge, catching all layers of the sweatband.

3.6.7.2 When finished, the right side back edge must be folded under and lapped over the left back edge and topstitched. Care must be taken to overlap the right side back approximately 3/4-inch (19 mm) from the centre back to reduce bulk.

3.6.7.3 The bottom edges of the sidewall assembly must be stitched to the inside edge brim assembly at 3/8-inch (9.5 mm) gauge.

3.6.7.4 The bottom long edge of the sweatband must be edge stitched to the sidewall and brim assembly seam allowance, ensuring that the ends of the chinstrap are secured in the stitching. The finished length of cording for the chinstrap must be 30-inches (76 cm) for all sizes.

3.6.7.5 The bottom edge of the outside hatband must be edge stitched through all layers ensuring that the sweatband is facing in and up.

3.6.7.6 To secure the sweatband, single bar tacks must be placed at evenly for a total of seven bar tacks around the sweatband. The stitching must be done through all layers of the hatband and

sweatband. Care must be taken to ensure that the sweatband is in the appropriate position while stitching through all layers.

3.6.7.7 The toggle must be placed on the chinstrap ensuring that it is secured by knotting the end of the cording.

3.7 **Marking and Label Information.** The following marking and care symbols must be printed legibly and indelibly with black printing on a coloured label (Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01) and in accordance with specification D-80-001-055/SF-001, Type I. The fabric must be nylon, acetate, or polyester. The label must be nominally 2-inches (5.0 cm) long by 1-1/4 inches (3.2 cm) wide. See Figure 4 for placement of the label (marked identification label on figure).

- a. NATO Stock Number (NSN) that is specific for each size. NSN's will be designated in the contract by item and size;
- b. Size (twice the size of all other lettering);
- c. Contractor's identification or CA number;
- d. Contract Number;
- e. Month and year of manufacture (MM/YYYY);
- f. Space to write personal identification;
- g. Care Symbols in accordance with CAN/CGSB-86.1-2003 as follows:
  1. Washing Symbol 6;
  2. Bleaching Symbol 3;
  3. Drying Symbol 2; and
  4. Ironing/Pressing Symbol 5

Example:



3.7.1 **Hang Tags.** No brand or product names must be permanently attached to the garment in any way. However, brand hang tags that are easily removed without causing damage to the product may be acceptable at no cost to the Crown, provided that approval for text and use has been granted by the Contracting Authority.

3.8 **Finishing.** Following assembly, the hat must be steamed to remove wrinkles and to provide a uniform finish on the hat.

#### 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 Canada or its designated representative. Canada 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 Canada for acceptance comply with all requirements of the contract.

#### 5. **PACKAGING**

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

5.2 The hat must be individually packaged in accordance with CFPTO-HATS. The abbreviated nomenclature for the label on the bags must be as follows:

Hat, Sun, CADPAT™ (TW) / Chapeau De Soleil, DcamC<sup>MC</sup> (RBT)

#### 6. **DEFINITION OF TERMS**

6.1 **Master Sealed Sample.** The master sealed sample is the only authorized prototype of the item to be produced and is held by Canada.

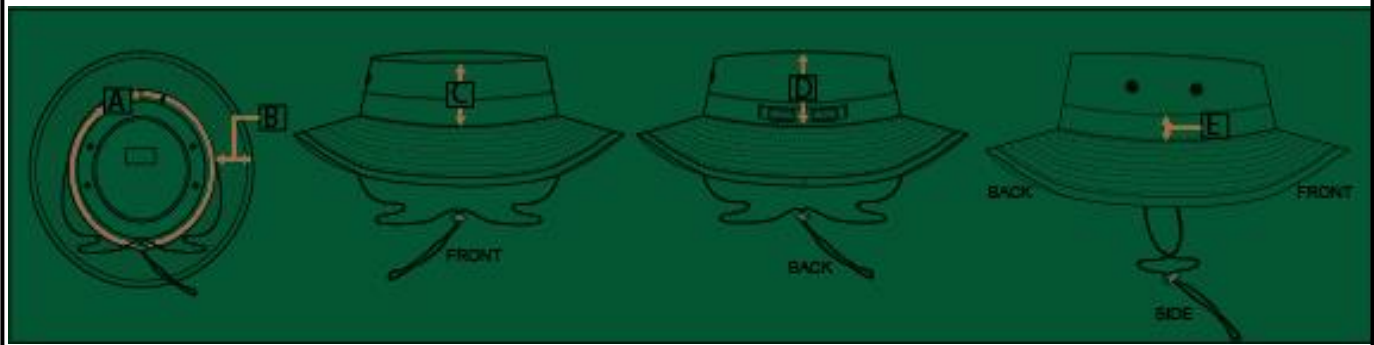
6.2 **Sealed Sample.** The sealed sample is a duplicate of the master sealed sample and is available to the manufacturer to be used as a guide in production.

6.3 **Quality Assurance Authority.** The quality assurance Authority is Canada's agency responsible for ensuring that the material and services supplied by the contractor perform to the specified requirements. The Quality Assurance Authority will be specified in the contract.

6.4 **Safety Health and Environmental Concerns.** 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.

**TABLE I: SCALE OF MEASUREMENTS**

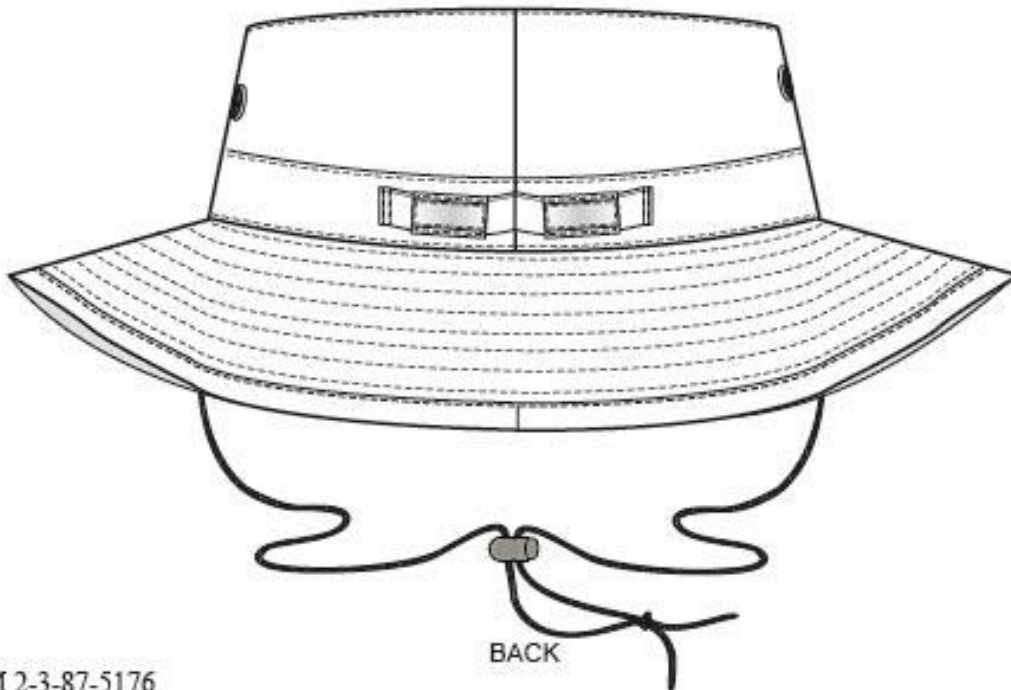
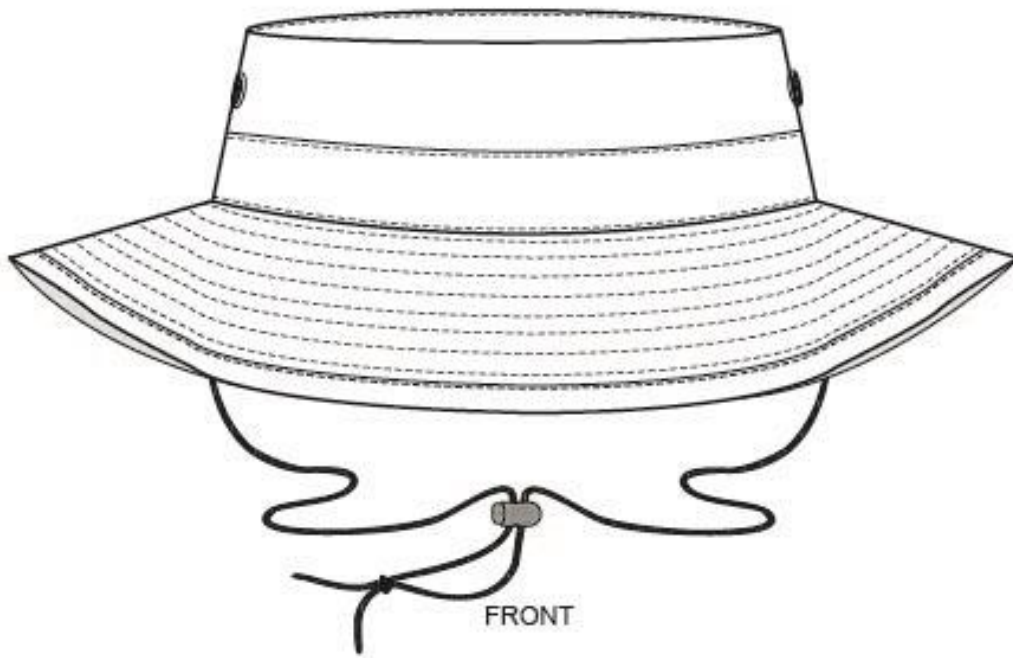
REF	SIZE												TOL
	6-1/2	6-5/8	6-3/4	6-7/8	7	7-1/8	7-1/4	7-3/8	7-1/2	7-5/8	7-3/4	7-7/8	
<b>A</b>	20-1/2	20-7/8	21-1/4	21-5/8	22	22-3/8	22-3/4	23-1/8	23-1/2	23-7/8	24-1/4	24-7/8	N/A
<b>B</b>	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	+1/8
<b>C</b>	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	2-3/4	+1/8
<b>D</b>	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	+1/8
<b>E</b>	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	+1/8



**TABLE II - NSNS AND SIZES**

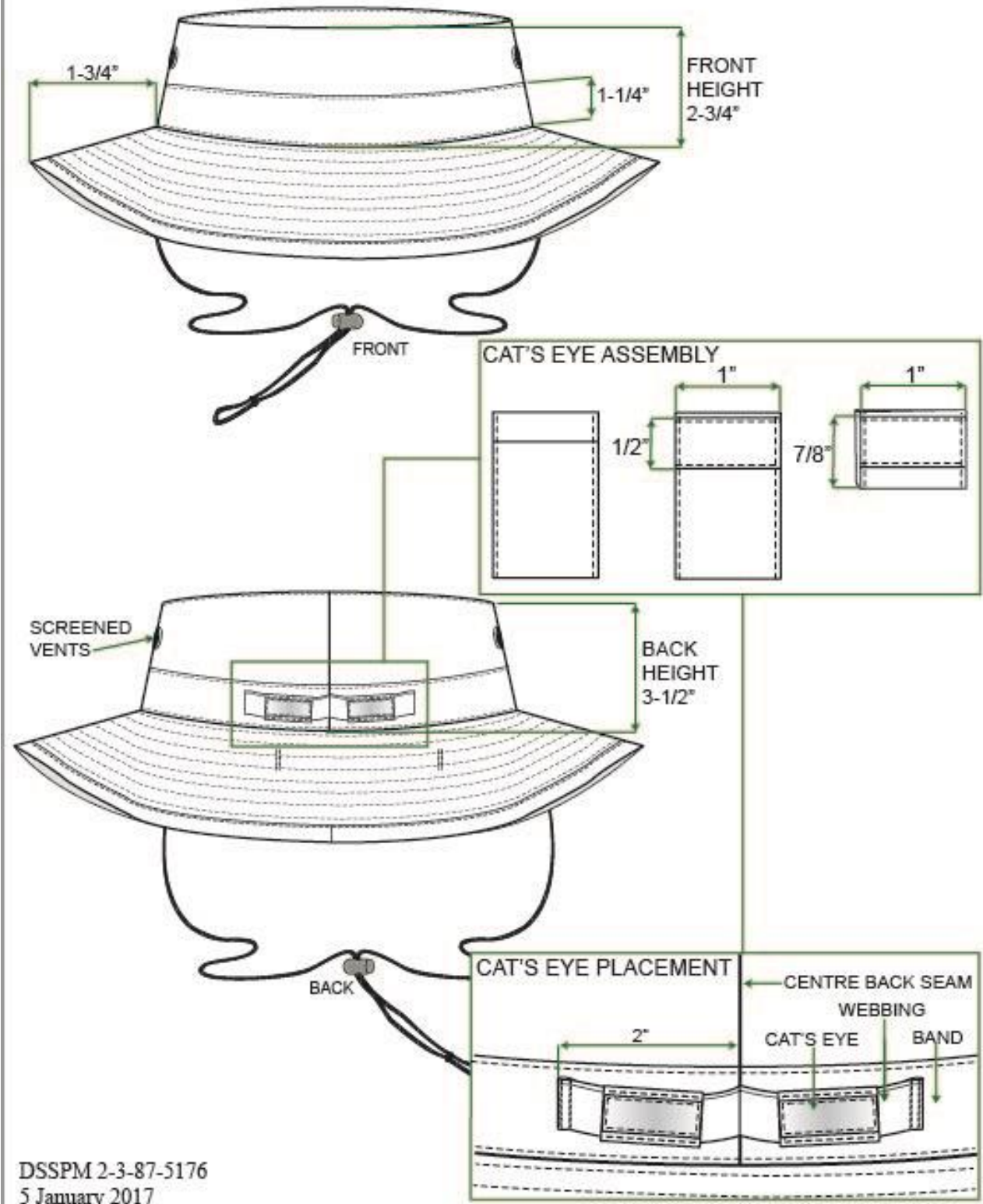
NSN	Nomenclature	Size
8415-21-914-5176	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	A/A
8415-21-914-5177	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	6 1/2
8415-21-914-5178	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	6 5/8
8415-21-914-5179	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	6 3/4
8415-21-914-5180	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	6 7/8
8415-21-914-5181	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7
8415-21-914-5182	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 1/8
8415-21-914-5183	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 1/4
8415-21-914-5184	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 3/8
8415-21-914-5185	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 1/2
8415-21-914-5186	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 5/8
8415-21-914-5187	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 3/4
8415-21-914-5188	HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT TW	7 7/8

FIGURE 1: FRONT AND BACK



DSSPM 2-3-87-5176  
5 January 2017

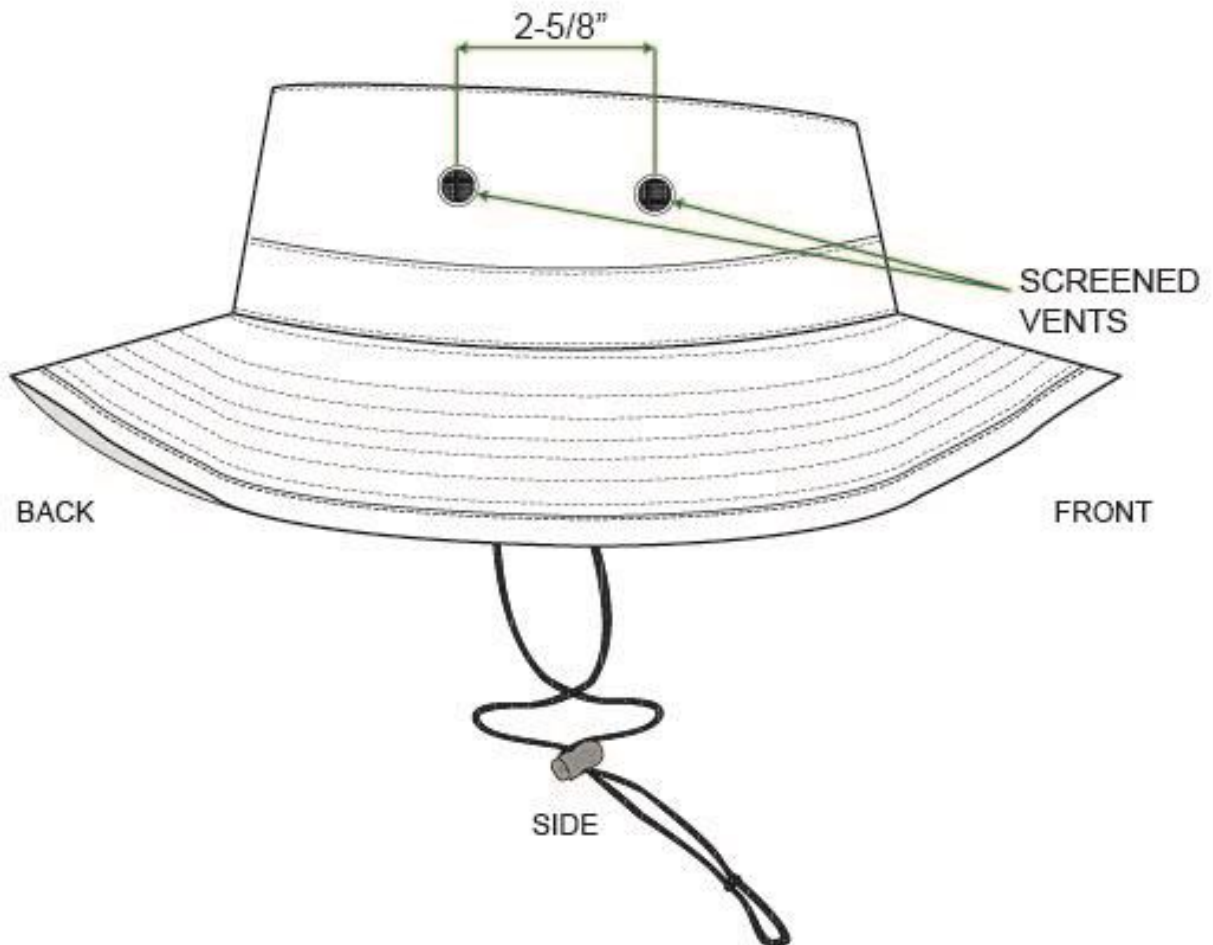
FIGURE 2: FRONT AND BACK DETAILS



DSSPM 2-3-87-5176  
5 January 2017

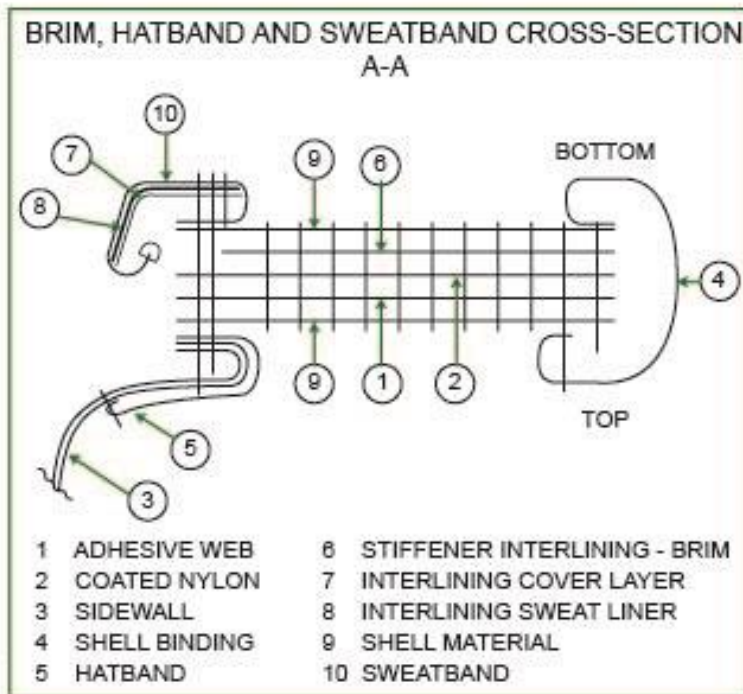
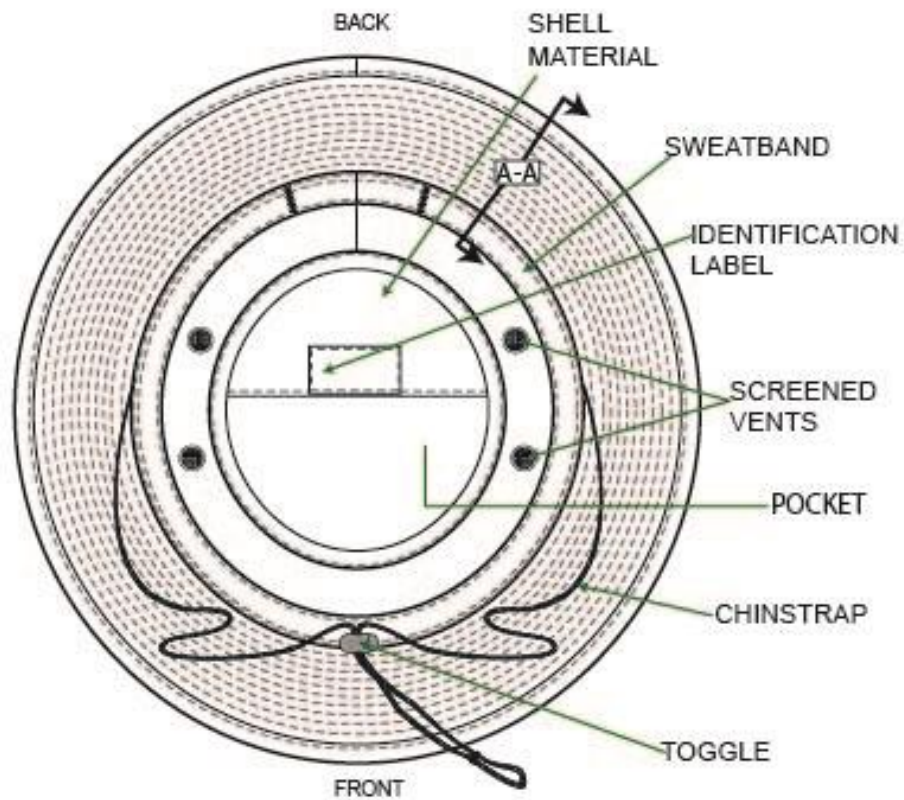


FIGURE 3: SIDE VIEW



DSSPM 2-3-87-5176  
5 January 2017

FIGURE 4: INSIDE DETAILS



DSSPM 2-3-87-5176  
 5 January 2017

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, COATED, TAFFETA,  
NYLON, POLYURETHANE**

**1. SCOPE**

**1.1 Scope.** This specification covers the requirements for Cloth, Coated, Taffeta, Nylon, Polyurethane.

**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 must be that in effect on the date of the invitation to tender. Sources are as shown.

**American Association of Textile Chemists and Colorists**  
P.O. Box 12215  
Research Triangle Park, NC  
27709, USA  
Telephone: 919-549-3526

**SPÉCIFICATION**

**POUR**

**TISSU, ENDUIT, TAFFETAS,  
NYLON, POLYURÉTHANNE**

**1. PORTÉE**

**1.1 Portée.** La présente spécification vise les exigences pour Tissu, enduit, taffetas, nylon, polyuréthane.

**2. DOCUMENTS APPLICABLES**

**2.1 Documents du gouvernement.** Sans objet.

**2.2 Autres publications.** Les publications suivantes font partie intégrante de la présente spécification dans la mesure prescrite par cette dernière. La version en vigueur à la date d'appel d'offres s'applique. La source de diffusion est celle qui est indiquée.

**American Association of Textile Chemists and Colorists**  
P.O. Box 12215  
Research Triangle Park, NC  
27709, ÉTATS-UNIS  
Téléphone: 919-549-3526

Website: [www.aatcc.org](http://www.aatcc.org)

### **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](mailto:ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca)  
Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

#### **2.3 Sealed patterns.**

DCGEM 272-80  
Cloth, Coated, Nylon, Taffeta- Polyurethane, (Finish)  
NSN 8305-21-851-3887

DCGEM 1392-84  
Cloth, Coated, Nylon, Taffeta-Polyurethane, Black,  
NSN 8305-21-897-9058

DCGEM 1390-84  
Cloth, Coated, Nylon, Taffeta-Polyurethane, AF Blue  
NSN 8305-21-847-9057

#### **2.4 Order of precedence.**

**2.4.1** In the event of any inconsistency in contract documents such as contract, specification and sealed patterns, the order of precedence must 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 must take precedence.

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

### **3. REQUIREMENTS**

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

Site Internet: [www.aatcc.org](http://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 ou 1 800-665-2472  
Courriel: [ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca](mailto:ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca)  
Site Internet: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

#### **2.3 Modèles réglementaires.**

DCGEM 272-80  
Tissu, enduit, taffetas, nylon, polyuréthane  
NSN 8305-21-851-3887

DCGEM 1392-84  
Tissu, enduit, taffetas, nylon, polyuréthane, noir,  
NSN 8305-21-897-9058

DCGEM 1390-84  
Tissu, enduit, taffetas, nylon, polyuréthane, Bleu Force  
Arienne  
NSN 8305-21-847-9057

#### **2.4 Ordre de préséance.**

**2.4.1** En cas de divergence entre les documents contractuels, tels le contrat, la spécification et les modèles réglementaires, l'ordre de préséance doit être: 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 2-2) 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, sa qualité 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 Sealed patterns.** A sealed pattern, when available, will be supplied to the successful bidder. Sealed patterns must constitute the standard only in regard to any properties not defined in this specification. Note that the order of precedence prevails (para 2.4). Sealed patterns must be returned to the Crown and under no circumstances must be mutilated or cut.

### **3.3 Materials.**

**3.3.1 Base fabric.** The base fabric must be of plain weave construction consisting of continuous filament nylon yarn in both warp and weft. When tested in accordance with the applicable test methods, the finished base fabric must comply with the requirements specified in Table I.

**3.3.2 Coating.** The woven textile shall be further processed by the application of a coating to the backside only of the goods. The polyurethane elastomer used shall be hydrolysis and mildew resistant. The resultant coating shall be uniform, and free from bubbles, pinholes, thin spots, delamination, or any other coating defects.

**3.3.3 Finish.** The coated cloth shall be given a durable water repellent finish to comply with the requirements of Table II. The finished coated cloth must comply with the requirements of Table II.

**3.4 Colour.** Colour must be as specified in the procurement documents. The colour required must match the applicable sealed pattern or numerical colour co-ordinates, whichever is specified. All visual colour matching to sealed patterns must 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 must be no greater than that exhibited by the sealed pattern.

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

**3.6 Piece marking.** Each piece of cloth must have a label attached to the selvage at one end. The label must be made of linen or heavy cardboard with a reinforced eyelet for attaching a tying cord. The label must be legibly printed with the following information:

**3.2 Modèles réglementaires.** Un modèle réglementaire, lorsque disponible, sera fourni au soumissionnaire retenu. Le modèle réglementaire doit constituer la norme la norme uniquement en ce qui concerne les propriétés qui ne sont pas définies aux présentes. Nota – L'ordre de préséance (par. 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 Matériaux.**

**3.3.1 Tissu de base.** Le tissu de base doit être de construction armure toile constitué de fils continus de filaments de nylon à la fois en chaîne et trame. Lors des essais conformément aux méthodes d'essai applicables, le tissu de base doit être conforme aux exigences spécifiées dans le tableau I.

**3.3.2 Enduit.** Le tissu de base doit être traité par l'application d'un enduit sur l'envers seulement. L'élastomère de polyuréthane utilisé doit être résistant à l'hydrolyse et à la moisissure. L'enduit qui en résulte doit être uniforme et exempt de bulles, de piqûres, d'endroits minces, de délaminage ou de tout autre défaut.

**3.3.3 Fini.** Le tissu enduit de polyuréthane doit recevoir un traitement hydrofuge durable conforme aux exigences du tableau II. Le tissu fini doit être conforme aux exigences prescrites au tableau II.

**3.4 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 Longueur.** Sauf indication contraire, 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.

**3.6 Marquage des pièces.** Une étiquette doit être apposée sur la lisière à une extrémité de chaque pièce. L'étiquette doit être faite de toile de lin ou de 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 metres (including allowance)
- c) Net length in metres
- d) Piece number
- e) Number of lengths per piece
- f) Nomenclature
- g) Colour
- h) Specification number
- i) Contract number, month and year
- 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 de la pièce
- e) Nombre de longueurs par pièce
- f) Nomenclature
- g) Couleur
- h) Numéro de la spécification
- i) Numéro, mois et année du contrat
- j) Numéro de nomenclature OTAN

#### **4. QUALITY CONTROL / INSPECTION**

**4.1** 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 désigné. 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.** Unless otherwise specified, packaging, packing, delivery and marking must be in accordance with the terms of the contract.

#### **5. CONDITIONNEMENT**

**5.1 Conditionnement et emballage.** Sauf indication contraire, 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) Type of cloth required
- c) Colour required
- d) Packaging and marking of shipping containers
- e) The Design Authority

#### **6. REMARQUES**

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

- a) Titre, numéro et date de la présente spécification
- b) Type de tissu requis
- c) Couleur requise
- d) Conditionnement et marquage des contenants d'expédition
- e) Autorité responsable de la conception

#### **6.2 Definition of terms.**

#### **6.2 Définition des termes.**

**6.2.1 Design Authority.** The Design Authority is the Government agency responsible for technical aspects of design and changes to design. Unless otherwise specified in the contract, the Design Authority 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.

**6.3 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.

## **7. ENVIRONMENT, HEALTH, and SAFETY**

**7.1** Recycled, recovered, and/or environmentally preferable materials: Recycled, recovered, and/or environmentally preferable materials should be used to the maximum extent possible, provided that the materials meet or exceed the operational and maintenance requirements, and promote economically advantageous life cycle costs.

**7.1.1** Manufacturing processes with minimal environmental impact are encouraged.

**7.1.2** The use of environmentally preferable materials and manufacturing methods applies to the items covered by this specification as well as to any of the packaging and shipping materials and methods required for delivery.

**7.2** Although certification is not a requirement at this time, textile materials covered by this specification should be eligible for certification to OEKO-TEX Standard 100 for class III products.

**7.3** 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

**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. Sauf indication contraire dans le contrat, il s'agit de la Direction, Administration du programme de l'équipement du soldat (DAPES).

**6.2.2 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 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 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.

## **7.0 ENVIRONNEMENT, SANTÉ ET SÉCURITÉ**

**7.1 Matériaux recyclés, récupérés et/ou écologiques :** Des matériaux recyclés, récupérés et/ou écologiques devraient être utilisés autant que possible, pourvu qu'ils respectent les exigences opérationnelles et les exigences en matière d'entretien, ou les dépassent, et qu'ils favorisent des économies pendant le cycle de vie des articles.

**7.1.1** Les procédés de fabrication ayant une incidence minimale sur l'environnement sont recommandés.

**7.1.2** L'utilisation de matériaux et de procédés de fabrication écologiques s'applique aux articles visés par la présente spécification ainsi qu'aux matériaux et méthodes de conditionnement et d'emballage nécessaires pour la livraison.

**7.2** Bien que la certification ne est pas une exigence en ce moment, les textiles visés par la présente spécification devraient être admissibles à une certification selon la norme 100 d'OEKO-TEX pour les produits de classe III.

**7.3** La fabrication ou l'évaluation d'un produit conformément à la présente spécification pourrait nécessiter l'utilisation de matériel ou d'équipement dangereux. La présente spécification n'a pas pour objet

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.

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 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 Base Cloth**

Property	Test Method	Minimum Acceptable	Maximum Acceptable
Mass (g/m <sup>2</sup> )	CAN/CGSB-4.2 No. 5.1	54	81
Fabric Count (yarns per cm)	CAN/CGSB-4.2 No. 6	Warp: 39 Weft: 31	
Breaking Strength (N)	CAN/CGSB-4.2 No. 9.1	Warp: 625 Weft: 490	
Colourfastness to Crocking	CAN/CGSB-4.2 No. 22 (Tests 6.1 & 6.2)		Colour change: Dry: GS 4 Wet: GS 4  Staining: Dry: GS 4 Wet: GS 4
Colourfastness to Light	AATCC 16.3 (Option 3)	Sample GS 4 after 40 AATCC Fading Units	
Colourfastness to Dry Cleaning	CAN/CGSB-4.2 No. 29.1		Colour change: GS 4
Non-Fibrous Materials	CAN/CGSB-4.2 No. 15 Note 1		2%

**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 II: Requirements for Finished Coated Cloth**

Property	Test Method	Minimum Acceptable	Maximum Acceptable
Mass (g/m <sup>2</sup> )	CAN/CGSB-4.2 No. 5.1	71	98
Width (cm) (excluding selvedge)	CAN/CGSB-4.2 No. 4.1	147	155
Tearing Strength (N)	CAN/CGSB-4.2 No. 12.1	Warp: 9 Weft: 9	
Breaking Strength (N)	CAN/CGSB-4.2 No. 9.1	Warp: 535 Weft: 445	
Water Resistance	CAN/CGSB-4.2 No. 26.3	No leakage at 90 cm	

**Tableau I : Exigences relatives au tissu de base**

Propriété	Méthode d'essai	Exigences minimales	Exigences maximales
Masse (g/m <sup>2</sup> )	CAN/CGSB-4.2 No. 5.1	54	81
Contexture (fils par cm)	CAN/CGSB-4.2 No. 6	Chaîne: 39 Trame: 31	
Résistance à la rupture (N)	CAN/CGSB-4.2 No. 9.1	Chaîne: 625 Trame: 490	
Solidité de la couleur au frottement (dégorgement)	CAN/CGSB-4.2 No. 22 (essais 6.1 & 6.2)		Changement de couleur: sec: échelle de gris 4 mouillé: échelle de gris 4  Tachage: sec: échelle de gris 4 mouillé: échelle de gris 4
Solidité de la teinture à la lumière	AATCC 16.3 (Option 3)	Échantillon - échelle de gris 4 après 40 unités de décoloration de l'AATCC	
Solidité de la couleur au solvant de nettoyage à sec	CAN/CGSB-4.2 No. 29.1		Changement de couleur: échelle de gris 4
Matières non fibreuses	CAN/CGSB-4.2 No. 15 Note 1		2%

**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.

**Tableau II : Exigences relatives au tissu fini (enduit)**

Propriété	Méthode d'essai	Exigences minimales	Exigences maximales
Masse (g/m <sup>2</sup> )	CAN/CGSB-4.2 No. 5.1	71	98
Largeur (cm) (sauf lisières)	CAN/CGSB-4.2 No. 4.1	147	155
Résistance à la déchirement (N)	CAN/CGSB-4.2 No. 12.1*	Chaîne: 9 Trame: 9	
Résistance à la rupture (N)	CAN/CGSB-4.2 No. 9.1	Chaîne: 625 Trame: 490	
Résistance à l'eau	CAN/CGSB-4 No. 2.3*	Aucune fuite à 90 cm	

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 must continue to apply.

AVIS

Le présent document a été révisé par l'autorité technique et ne contient pas de dispositions visant des marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues initialement doivent continuer de s'appliquer.

**SPECIFICATION**

**FOR**

**CADPAT™**

**(CANADIAN DISRUPTIVE PATTERN)**

**SPÉCIFICATION**

**DCamC<sup>MC</sup>**

**(DESSIN DE CAMOUFLAGE CANADIEN)**

**1. SCOPE**

**1.1.** This Specification in its entirety defines the technical performance requirements for Canadian Disruptive Pattern (CADPAT™) colours and patterns for Multi-Terrain (MT), Temperate Woodland (TW), Arid (AR), and Winter Operations (WO) regions. This Specification is to be used for the technical requirements, production, and evaluation of materiel in CADPAT™ and CADPAT™ colours for the Canadian Armed Forces.

1.1.1. The substrates onto which the CADPAT™ patterns are applied are varied in composition and are not limited to textiles. In the case of textiles, some of the requirements for CADPAT™ may differ from those defined herein depending on the specific textile substrate. Any deviations to the CADPAT™ requirements defined herein will be defined in the applicable Textiles Specifications and those deviations will take precedence.

**1. PORTÉE**

**1.1.** La présente spécification dans sa totalité définit les exigences de rendement technique relatives aux couleurs et aux motifs du dessin de camouflage canadien (DCamC<sup>MC</sup>) pour multi-terrain (MT), régions boisées tempérées (RBT), pour régions arides (RA) et pour l'hiver/arctique (H/A). Elle est destinée à être utilisée pour les exigences techniques, la production et l'évaluation du tissu aux motifs et aux couleurs du DCamC<sup>MC</sup> à l'intention des Forces armées canadiennes.

1.1.1. Les substrats sur lesquels les motifs du DCamC<sup>MC</sup> sont appliqués sont de composition variée et ne se limitent pas aux textiles. Dans le cas des textiles, certaines des exigences pour le DCamC<sup>MC</sup> peuvent différer de celles définies ici en fonction du substrat textile spécifique. Tout écart par rapport aux exigences du DCamC<sup>MC</sup> définies dans le présent document sera défini dans les spécifications textiles applicables et ces écarts prévaudront.

**1.2.** The information contained herein is Copyright to Her Majesty the Queen of Canada, as are the associated patterns. The term CADPAT™, with and without extensions, is a registered Trademark belonging to the Department of National Defence. Any of the data contained in this specification, and the associated patterns, may be used only for goods for Canada. The printed textile and any items made therefrom must be for the sole end use of DND. There must be no selling or offering for sale of goods incorporating the CADPAT™ patterns and colours to any person or entity other than Canada without the Minister's prior written authorization. Explicit in this is that any goods of not first quality produced must not be released, sold, or offered for sale, directly or indirectly, to any person or corporation other than Canada without the Minister's prior written authorization.

**1.3.** The information, data, know-how, formulas, algorithms, software, processes, systems, methods, designs, text, works, figures, tables, sketches, photographs, plans, drawings, specifications, samples, reports, names, inventions and/or ideas contained herein (hereinafter "Intellectual Property") is the exclusive property of Her Majesty the Queen in Right of Canada as represented by the Minister of National Defence (hereinafter referred to as "DND"). No one has the right to reproduce, disclose, disseminate, or utilize, in any manner or in any form, this Intellectual Property, or any part thereof, without the prior written consent of DND. For further information on the restrictions applicable to this Intellectual Property, or to request consent from DND, please contact the Design Authority.

## **2. APPLICABLE REFERENCES**

### **2.1. Government Documents.**

2.1.1. Copies of this Specification may be obtained from the Department of National Defence, Ottawa, Ontario, Canada, K1A 0K2, Attention: DSSPM 3-7.

### **2.2. Other Publications.**

2.2.1. The following documents form part of this Specification to the extent specified herein. Effective dates must be those in effect on the date of

**1.2.** L'information contenue dans le présent document, ainsi que les motifs connexes, sont la propriété de Sa Majesté la Reine du Canada et sont protégés par droits d'auteur. Le terme DCamC<sup>MC</sup>, avec ou sans extension, est une marque déposée, propriété du ministère de la Défense nationale. Les données contenues dans la présente spécification et les motifs connexes ne peuvent être utilisés que pour des marchandises produites pour le Canada. Les tissus imprimés et tous les articles fabriqués dans ce tissu sont à l'usage final exclusif du MDN. Nul bien incorporant les motifs et les couleurs du DCamC<sup>MC</sup> ne peut être vendu ni offert à toute personne ou entité autre que le Canada sans l'autorisation préalable écrite du ministre. De façon explicite, tout bien qui n'est pas de première qualité ne peut être distribué, vendu ou offert à la vente, directement ou indirectement, à toute personne physique ou morale autre que le Canada sans l'autorisation préalable écrite du ministre.

**1.3.** Les renseignements, données, formules, algorithmes, logiciels, processus, systèmes, méthodes, dessins, ouvrages, figures, tableaux, croquis, photos, plans, dessins, spécifications, échantillons, rapports, noms, inventions ou idées, de même que le libellé ou le savoir-faire figurant aux présentes (ci-après désignés sous le nom collectif « propriété intellectuelle ») sont la propriété exclusive de Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale (ci-après le « MDN »). Nul n'a le droit de reproduire, divulguer, diffuser ou utiliser, de quelque manière ou sous quelque forme que ce soit, cette propriété intellectuelle, en tout ou en partie, sans le consentement écrit préalable du MDN. Pour de plus amples informations sur les restrictions applicables à cette propriété intellectuelle, ou pour demander le consentement du MDN, veuillez contacter l'autorité responsable de la conception.

## **2. DOCUMENTS APPLICABLES**

### **2.1. Documents du gouvernement**

2.1.1. Des copies de la présente spécification peuvent être obtenues auprès du ministère de la Défense nationale, Ottawa (Ontario), Canada, K1A 0K2, à l'attention de : DAPES 3-7.

### **2.2. Autres publications**

2.2.1. Les documents suivants font partie intégrante de la présente spécification dans la mesure prescrite par cette dernière. Les dates

this version of the specification (as noted in the first page header of this document).

d'entrée en vigueur doivent être celles en vigueur à la date de cette version de la spécification (comme indiqué dans l'en-tête de la première page de ce document).

AMS-STD-595™	SAE International - Aerospace Material Specification - Colors Used in Government Procurement	AMS-STD-595™	SAE International - Aerospace Material Specification - Colors Used in Government Procurement
ASTM E308	Standard Practice for Computing the Colors of Objects by Using the CIE System (CIE: International Commission on Illumination)	ASTM E308	Standard Practice for Computing the Colors of Objects by Using the CIE System (CIE: Commission Internationale de l'Eclairage)
ASTM D523	Standard Test Method for Specular Gloss	ASTM D523	Standard Test Method for Specular Gloss
ISO 105-B02	Textiles – Tests for colour fastness – Part B02: Colour fastness to artificial light: Xenon arc fading lamp test	ISO 105-B02	Textiles – Essais de solidité des coloris – Partie B02 : Solidité des coloris à la lumière artificielle : Lampe à arc au xénon
ISO 105-J03	Textiles – Tests for colour fastness – Part J03L Calculation of colour differences	ISO 105-J03	Textiles – Essais de solidité des teintures – Partie J03L : Calcul des écarts de couleur

### 2.3. Order of Precedence.

2.3.1. In the event of a conflict between the text of this Specification and the references cited herein, the text of this specification will take precedence.

2.3.2. In the event of inconsistency within the Specification, the Design Authority must be contacted for clarification.

2.3.3. For any inconsistency in technical details between languages, the language of the original document, which in this case is English, will take precedence.

2.3.4. Any deviation(s) from the requirements outlined in this Specification, will be outlined in the materiel specification.

## 3. REQUIREMENTS

### 3.1. CADPAT™ Pattern.

3.1.1. CADPAT™ posters are available, by request, from the Design Authority, as a guide for

### 2.3. Ordre de préséance

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

2.3.2. En cas d'incohérence dans l'énoncé de la spécification, il faut communiquer avec l'autorité responsable de la conception pour obtenir des précisions.

2.3.3. En cas d'incohérence dans les détails techniques, entre les deux langues, la langue du document d'origine, dans ce cas-ci l'anglais, a préséance.

2.3.4. Tout écart par rapport aux exigences prescrites dans la présente spécification sera indiqué dans les spécifications du tissu.

## 3. EXIGENCES

### 3.1. Motif DCamC™

3.1.1. Des affiches du DCamC™ sont disponibles, sur demande, auprès de l'autorité responsable de la conception, et serviront de guide

production when a CADPAT™ pattern is required. The CADPAT™ posters reflect the design, pattern, motifs, repeat, and clarity that are required for CADPAT™ printing.

3.1.2. The CADPAT™ posters are available as hardcopy and electronically in Portable Document Format (PDF) and Adobe Illustrator Artwork (AI) formats.

3.1.3. The scale of pattern on the printed goods (see section 4 below) supplied by the Bidder or Contractor must be within 10% of the scale of the CADPAT™ posters. The distance between all points of the printed pattern must be within 10% of the distance between the same points on the full scale poster.

3.1.3.1. The Design Authority will verify the scale of pattern measurement when required.

3.1.4. The CADPAT™ patterns on the samples, (see section 4 below) supplied by the Bidder or Contractor must be free from imperfections or blemishes which may adversely affect its appearance or serviceability. For inspection purposes, imperfections and blemishes must be considered defects when clearly visible at a normal inspection distance of approximately one metre under North Light lighting conditions.

## 3.2. Visible Colour.

3.2.1. Each colour in each of the CADPAT™ patterns is defined by the CIE L\*a\*b\* coordinates specified in Table I.

3.2.1.1. For contract purposes, when not specified elsewhere, each colour must meet the  $\Delta E_{cmc}$  tolerance requirements specified in Table I.

3.2.1.2. Colour tolerances and colour matching requirements specified in the textile specifications supersede the tolerances specified in this specification.

3.2.2. Each colour must be measured in accordance with ASTM E308-08 as specified in Table I.

3.2.2.1. Textile samples used for measurement must be composed of 4 layers of self-fabric on a matte black background. Each layer must align the same colour as the colour being measured. Opaque

pour la production lorsqu'un motif DCamC<sup>MC</sup> est requis. L'affiche du DCamC<sup>MC</sup> reflète la conception, le dessin, les motifs, les répétitions, et la clarté requis pour l'impression du DCamC<sup>MC</sup>.

3.1.2. Les affiches du DCamC<sup>MC</sup> sont disponibles en format papier et en format électronique, soit en format de document portable (PDF) et en Adobe Illustrator Artwork (AI).

3.1.3. L'échelle du motif sur les produits imprimés (voir la section 4 ci-dessous) fournis par le soumissionnaire ou l'entrepreneur doit être inférieure ou égale à 10 % de l'échelle des affiches du DCamC<sup>MC</sup>. La distance entre tous les points du motif imprimé doit se situer dans les 10 % de la distance entre les mêmes points sur l'affiche pleine échelle.

3.1.3.1. Au besoin, l'autorité responsable de la conception mesurera l'échelle du motif.

3.1.4. Les motifs du DCamC<sup>MC</sup> sur les échantillons (voir la section 4 ci-dessous) fournis par le soumissionnaire ou l'entrepreneur doivent être exempts d'imperfections ou de défauts qui pourraient nuire à son aspect ou à sa tenue en service. À des fins d'inspection, sont considérés comme des défauts ceux qui sont clairement visibles à une distance normale d'environ un mètre sous un bon éclairage (lumière du jour provenant du nord).

## 3.2. Couleurs visibles

3.2.1. Chaque couleur dans chacun des motifs du DCamC<sup>MC</sup> est définie par les coordonnées CIE L \* a \* b \* spécifiées dans le tableau I.

3.2.1.1. Aux fins du contrat, lorsqu'elles ne sont pas spécifiées ailleurs, chaque couleur doit répondre aux exigences de tolérance  $\Delta E_{cmc}$  spécifiées dans le tableau I.

3.2.1.2. Les tolérances de couleur et les exigences de correspondance des couleurs spécifiées dans les spécifications textiles remplacent les tolérances spécifiées dans cette spécification.

3.2.2. Les couleurs visibles doivent être mesurées conformément à la norme ASTM E308-08, comme il est indiqué dans le tableau I.

3.2.2.1. Les échantillons de textile utilisés pour la mesure doivent être composés de 4 couches de même tissu sur un fond noir mat. Chaque couche doit aligner la même couleur que la couleur

coated and laminated fabrics may be measured with a single layer on a matte black background.

3.2.2.2. A minimum of 4 measurements are to be taken for each colour. Measurements must be taken across the sample, rotating the sample 90° between each measurement. Measurements are then to be averaged and the average reported as a single measurement set.

3.2.3. Colour difference must be measured in accordance with ISO 105-J03 using  $\Delta E_{cmc}(l:c)$  colour difference formulas with parametric factors lightness,  $l = 2$ , and chromaticity,  $c = 1$ .

### 3.3. Near Infrared and Ultraviolet.

3.3.1. Measurements of near infrared and ultraviolet (where applicable) reflectance are to be made using testing apparatus as specified in Table I.

3.3.2. Sample preparation must be as described in para 3.2.2.

3.3.3. For each colour, the required reflectance values are provided in Tables II, III, and IV. The measured values must be no less than the minimum and no greater than the maximum allowable reflectance values for all specified wavelengths in these tables.

3.3.3.1. Measurements must be taken and reported at 10 nm intervals. Evaluation for compliance will be made at 50 nm intervals as indicated in Tables II, III and IV.

### 3.4. Gloss

3.4.1. Specular gloss must be measured in accordance with ASTM D523 using 85° geometry.

3.4.2. All colours must be matte. For each colour, spectral gloss measurements must be no greater than the maximum values specified in Table I.

### 3.5. Colour Fastness to Light.

3.5.1. Colour fastness must be measured in accordance with ISO 105-B02 as specified in Table I.

mesurée. Les tissus enduits et stratifiés opaques peuvent être mesurés avec une seule couche sur un fond noir mat.

3.2.2.2. Un minimum de 4 mesures doivent être prises pour chaque couleur. Les mesures doivent être prises à travers l'échantillon, en faisant tourner l'échantillon de 90 ° entre chaque mesure. Les mesures doivent ensuite être moyennées et la moyenne rapportée comme un seul ensemble de mesures.

3.2.3. La différence de couleur doit être mesurée conformément à la norme ISO 105-J03, à l'aide de la formule  $\Delta E_{cmc}(l:c)$ , où la clarté des facteurs paramétriques est  $l = 2$ , et la chromaticité,  $c = 1$ .

### 3.3. Infrarouge proche et ultraviolet

3.3.1. Les mesures du proche infrarouge et du rayonnement ultraviolet doivent être effectuées avec l'appareil d'essai spécifié au tableau I.

3.3.2. La préparation des échantillons doit être conforme à la description du paragraphe 3.2.2.

3.3.3. Les valeurs de réflectance requises pour chaque couleur sont fournies aux tableaux II, III et IV. Les valeurs mesurées ne doivent pas être inférieures à la valeur minimale ni supérieures à la valeur maximale permise pour toutes les longueurs d'onde spécifiées dans ces tableaux.

3.3.3.1. Les mesures doivent être prises et rapportées à des intervalles de 10 nm. L'évaluation de la conformité sera effectuée à des intervalles de 50 nm comme indiqué dans les tableaux II, III et IV.

### 3.4. Brillant

3.4.1. Le brillant spéculaire doit être mesuré conformément à la norme ASTM D523, à l'aide d'une géométrie de 85°.

3.4.2. Toutes les couleurs doivent être mates. Pour chaque couleur, les mesures du brillant spéculaire ne doivent pas dépasser les valeurs maximales indiquées au tableau I.

### 3.5. Solidité de la couleur à la lumière

3.5.1. La solidité de la couleur doit être mesurée conformément à la norme ISO 105-B02 et selon les indications du tableau I.

3.5.2. All colours must achieve a colour fastness rating of 6 or better.

### 3.6. Print Quality. (For Textile Materials)

3.6.1. Textile materials must be pre-dyed prior to printing. Dyeing and printing operations must be carried out with dyes (i.e. pigments must not be used). The class(es) of dyestuff(s) used must be appropriate for the fibre content of the fabric.

3.6.2. All component fibres in the textile must be completely penetrated with the dyes to obtain an overall print quality, including colour penetration (i.e. the overall colouring of the opposite side of the printed textile), uniformity of each colour, clarity, definition, and evenness that are indicative of a good print.

3.6.3. Textile materials must not have any finish applied to obtain temporary colour or temporary near infrared reflectance (NIRR) compliance.

### 3.7. Solid Colour – Coyote Brown

3.7.1. Coyote Brown 476/498 has been identified as the colour required for any solid coloured components (e.g. webbings, buckles, tapes etc.) or solid coloured garments that are used with the CADPAT™ (MT) pattern.

3.7.2. The visual standard for Coyote Brown 476/498 is AMS-STD-595™ “Colors Used in Government Procurement”, Colour Chip #20150.

3.7.3. As per AMS-STD-595™, when measured in accordance with the measurement conditions specified in Table I, the CIE L\*a\*b\* coordinates for Coyote Brown 476/498 are:

$$\begin{aligned}L^* &= 45.44 \\a^* &= 4.66 \\b^* &= 15.18\end{aligned}$$

3.7.3.1. When not otherwise specified in the applicable material or product specifications or the contracting documents, the acceptable colour difference (as per para 3.2.3) is  $\Delta E_{cmc} < 2$ .

3.7.4. Near Infrared Reflectance (NIRR) measurement and reporting conditions for Coyote Brown are in accordance with those specified in section 3.3 and Table I.

3.5.2. Toutes les couleurs doivent avoir une solidité de 6 ou plus.

### 3.6. Qualité d'impression (des tissus)

3.6.1. Les matériaux textiles doivent être teints au préalable, avant l'impression. Les opérations de teinture et d'impression doivent être réalisées avec des colorants (c.-à-d. aucun pigment ne doit être utilisé). Les catégories de colorants utilisées doivent convenir à la teneur en fibres du tissu.

3.6.2. La pénétration complète de toutes les fibres composant le tissu est requise pour obtenir la qualité globale de l'impression, y compris la pénétration de la couleur (c.-à-d. la coloration globale de l'envers du tissu imprimé), l'uniformité de chaque couleur, la clarté, la définition et la régularité doivent être indicatives d'une bonne impression.

3.6.3. Aucun fini ne doit être appliqué sur le tissu pour obtenir temporairement la conformité à la couleur ou à la réflectance dans le proche infrarouge.

### 3.7. Couleur unie - Coyote Brown

3.7.1. Le Coyote Brown 476/498 a été identifié comme la couleur requise pour tous les composants de couleur unie (par exemple, sangles, boucles, rubans, etc.) ou les vêtements de couleur unie qui sont utilisés avec le motif DCamC<sup>MC</sup> (MT).

3.7.2. La norme visuelle pour le Coyote Brown 476/498 est AMS-STD-595<sup>MC</sup> «Couleurs utilisées dans les marchés publics», puce de couleur # 20150.

3.7.3. Selon l'AMS-STD-595<sup>MC</sup>, lorsqu'elles sont mesurées conformément aux conditions de mesure spécifiées dans le Tableau I, les coordonnées CIE L\*a\*b\* pour Coyote Brown 476/498 sont:

$$\begin{aligned}L^* &= 45,44 \\a^* &= 4,66 \\b^* &= 15,18\end{aligned}$$

3.7.3.1. Sauf indication contraire dans les spécifications des matériaux ou des produits applicables ou dans les documents contractuels, la différence de couleur acceptable (conformément au paragraphe 3.2.3) est  $\Delta E_{cmc} < 2$ .

3.7.4. Les conditions de mesure et de déclaration de la réflectance dans le proche infrarouge (NIRR) pour le Coyote Brown sont conformes à celles spécifiées à la section 3.3 et au tableau I.



3.7.4.1. The requirements for NIRR of Coyote Brown for specific products will be as per the applicable specification for that product.

3.7.4.1. Les exigences relatives au NIRR du Coyote Brown pour des produits spécifiques seront conformes aux spécifications applicables à ce produit.

3.7.5. Gloss measurement and reporting conditions are specified in section 3.4 and Table I.

3.7.5. Les conditions de mesure et de notification du brillant sont spécifiées à la section 3.4 et au tableau I.

3.7.5.1. The gloss requirements for solid colour Coyote Brown products is  $\leq 1$  unit.

3.7.5.1. Le brillant requis pour les produits de couleur unie Coyote Brown est  $\leq 1$  unité.

#### **4. TESTING**

#### **4. ESSAIS**

##### **4.1. General.**

##### **4.1. Généralités**

4.1.1. The Bidder and Contractor are responsible for all testing as specified herein and to demonstrate that the materiel conforms to all the requirements outlined in this Specification.

4.1.1. Il incombe au soumissionnaire et à l'entrepreneur d'effectuer tous les essais prescrits dans le présent document et de démontrer que le tissu est conforme à toutes les exigences énoncées dans la présente spécification.

4.1.2. The Crown reserves the right to perform any of the inspections or tests specified herein, where such are deemed necessary to ensure the materiel submitted to the Crown for acceptance meets all requirements of the contract. This applies equally to materiel contracted for delivery directly to the Department of National Defence or as component parts to a supplier with a contract for products for Defence use.

4.1.2. Le gouvernement se réserve le droit d'effectuer toute vérification ou tout essai jugé nécessaire pour s'assurer que le matériel présenté au gouvernement pour acceptation est conforme à toutes les exigences énoncées dans le contrat. Cela s'applique également au matériel obtenu sous contrat qui doit être livré directement au ministère de la Défense nationale ou comme composants livrés à un fournisseur dans le cadre d'un contrat pour des produits à des fins militaires.

4.1.3. All submitted samples will remain property of the Crown following submission.

4.1.3. Tous les échantillons soumis demeureront la propriété du gouvernement.

##### **4.2. Pre-Contract Award Test Reports & Sample.**

##### **4.2. Échantillons et rapports d'essai préalables à l'attribution du contrat**

4.2.1. When not otherwise specified in the contracting documents, the following Pre-Contract Award requirements apply.

4.2.1. Sauf indication contraire dans les documents contractuels, les exigences d'attribution avant contrat suivantes s'appliquent.

4.2.2. The Bidder must provide Standards Council of Canada (SCC), CE, or equivalent accredited third-party test reports to the Technical Authority, in full accordance with all specified test methods and conditions.

4.2.2. Le soumissionnaire doit fournir à l'autorité technique des rapports d'essai accrédités par le Conseil canadien des normes (CCN), le CE ou par une tierce partie équivalente, comme il est indiqué dans les exigences du tableau I, conformément à toutes les méthodes et conditions d'essai spécifiées.

4.2.3. Third-party test report testing must be performed on the final product.

4.2.3. Les essais décrits dans les rapports doivent être menés sur le produit fini.

4.2.4. Third-party test report data is valid for twenty-four (24) months from the date of the test.

4.2.5. The Bidder must provide one (1) pre-contract award material sample to the TA, for inspection and evaluation done by the TA or Design Authority.

### **4.3. Pre-Production Test Reports & Sample.**

4.3.1. When not otherwise specified in the contracting documents, the following Pre-Production requirements apply.

4.3.2. The Contractor must provide SCC, CE, or equivalent accredited third party laboratory test reports to the TA, for Visible Colour (see para. 3.2) and Near Infrared and Ultraviolet (see para. 3.3) reflectance requirements in full accordance with all specified test methods and conditions.

4.3.3. Testing must be performed on the final product that will be delivered under the Contract.

4.3.4. Test reports must be applicable to the fabric lot of the sample submitted (para 4.3.5). Both the test report and the sample must clearly indicate the applicable production lot.

4.3.5. The Contractor must provide one (1) pre-production material sample to the TA, for inspection and evaluation by the TA or Design Authority.

### **4.4. Production Test Reports.**

4.4.1. When not otherwise specified in the contracting documents, the following Production requirements apply.

4.4.2. For each and every shipment of CADPAT™ printed goods, the Contractor must submit to the TA test reports directly applicable to the goods being shipped, for Visible Colour (see para. 3.2) and Near Infrared and Ultraviolet (see para. 3.3) measurements, for each additional 5,000 metres batch of CADPAT™ printed textile.

4.2.4. Les données relatives au rapport d'essai d'une tierce partie sont valides pendant vingt-quatre (24) mois à partir de la date du test.

4.2.5. Le soumissionnaire doit fournir au responsable technique un (1) échantillon de tissu préalable à l'attribution du contrat, pour inspection et évaluation par l'autorité technique ou l'autorité responsable de la conception.

### **4.3. Échantillons et rapports d'essai de pré-production.**

4.3.1. Sauf indication contraire dans les documents contractuels, les exigences de pré-production suivantes s'appliquent.

4.3.2. L'entrepreneur doit fournir à l'autorité technique des rapports d'essai accrédités par le Conseil canadien des normes (CCN), le CE ou par une tierce partie équivalente, sur les exigences relatives à la réflectance pour couleur visible (voir para. 3.2), le proche infrarouge et l'ultraviolet (voir para. 3.3), conformément à toutes les méthodes et conditions d'essai prescrites.

4.3.3. Les essais décrits dans les rapports doivent être menés sur le produit fini qui seront livré dans le présent contrat.

4.3.4. Les données présentées dans le rapport d'essai doivent provenir d'essais menés sur le lot de l'échantillon soumis (paragraphe 4.3.5). Le rapport d'essai et l'échantillon doivent indiquer clairement le lot de production applicable.

4.3.5. L'entrepreneur doit fournir à l'autorité technique un (1) échantillon de tissu de présérie, pour inspection et évaluation par l'autorité technique ou l'autorité responsable de la conception.

### **4.4. Rapports d'essai de production**

4.4.1. Sauf indication contraire dans les documents contractuels, les exigences de production suivantes s'appliquent.

4.4.2. Pour tous les envois de tissu imprimé avec le DCamC<sup>MC</sup>, l'entrepreneur doit fournir à l'autorité technique des rapports d'essai additionnels sur les marchandises expédiées, au sujet des mesures de la couleur visible (voir para. 3.2), du proche infrarouge et de l'ultraviolet (voir para. 3.3), ainsi que pour chaque lot additionnel de 5 000 m de tissu imprimé avec le DCamC<sup>MC</sup>,

## 5. CADPAT™ USE AND CONTROL.

**5.1.** CADPAT™ is not considered to be a "Controlled Good" by The International Traffic in Arms (ITAR) or Controlled Technology and Transfer (CTAT) definitions as determined by the Department of Foreign Affairs and International Trade (DFAIT) in 2002, however, it is subject to DND controls with respect to intellectual property, research and development, application/use, distribution and disposal.

**5.2.** The use of CADPAT™ is protected by Canadian copyright laws and patents held by DND and managed by Director Material Property and Procedures, Intellectual Property (DMPP IP).

**5.3.** Potential bidders and contractors wishing to develop CADPAT™ products must sign non-disclosure agreements with DND. The Design Authority is responsible for managing the non-disclosure agreements that were prepared by DMPP.

## 6. NOTES.

**6.1.** 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. Definition of terms.

**6.2.1. Design Authority.** The Design Authority is the Government agency responsible for the technical aspects of the design and for changes to the design. The Design Authority for this specification is the Camouflage, Concealment, and Deception Engineer, DSSPM 3-7 at the Directorate of Soldier Systems Programme Management (DSSPM), Department of National Defence.

## 5. UTILISATION DU DCamC<sup>MC</sup> ET CONTRÔLE

**5.1.** Le DCamC<sup>MC</sup> n'est pas considéré comme une marchandise contrôlée par l'International Traffic in Arms (ITAR) ou selon les définitions du site Accès et transfert de la technologie contrôlée (ATTC), comme l'a déterminé le ministère des Affaires étrangères et du Commerce international (MAECI) en 2002. Cependant, il fait l'objet d'un contrôle par le MDN relativement à la propriété intellectuelle, à la recherche et au développement, à l'application ou à l'utilisation, à la distribution et à l'élimination.

**5.2.** L'utilisation du DCamC<sup>MC</sup> est protégée par la *Loi sur le droit d'auteur* et les brevets détenus par le MDN et gérée par le Directeur – Politiques et procédures (Matériel), propriété intellectuelle (DPPM PI).

**5.3.** Les soumissionnaires potentiels et les entrepreneurs qui souhaitent fabriquer des produits avec le DCamC<sup>MC</sup> doivent signer des ententes de confidentialité avec le MDN. L'autorité responsable de la conception sera chargée de gérer les ententes de confidentialité préparées par le DPPM.

## 6. NOTES

**6.1.** La fabrication ou l'évaluation d'un produit conformément à la présente spécification pourrait 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 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.

### 6.2. Définition des termes

**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 des articles visés par la présente spécification, il s'agit de l'ingénieur en camouflage, dissimulation et déception, DAPES 3-7, à la Direction de l'administration du programme de l'équipement du soldat (DAPES) du ministère de la Défense nationale.

6.2.2. **Technical Authority.** Where referenced in this Specification, the Technical Authority is the individual responsible for providing information, guidance and advice on the technical aspects of the materiel being procured. This individual will be identified in supporting procurement documentation.

6.2.2. **Autorité technique.** Lorsqu'il en est fait mention dans la présente spécification, l'autorité technique est la personne chargée de fournir de l'information, des directives ou des conseils concernant les aspects techniques du tissu visé par le présent document. Cette personne sera désignée dans les documents d'achat.

Table I. Technical Performance Requirements for Canadian CADPAT™ Colours  
Tableau I. Exigences techniques en matière de rendement pour les couleurs du DCam<sup>MC</sup>

Property Propriété	Colour Couleur	Requirement Exigence	Tolerance* Tolérance	Standard Norme		
<b>Chromaticity Coordinates and Luminance</b>  <i>Coordonnées trichromatiques et luminance</i>	MT MT	Olive Olive	L* = 50 a* = 0 b* = 22	$\Delta E_{cmc} < 3$	ASTM E308-08  Colour Space/ Espace L*a*b* colorimétrique  CIE Standard Illuminant D65/Illuminant standard D65 de la CIE  Observer Geometry/ Géométrie observateur  Specular Component/ Composante spéculaire  Calculation Range/Plage de calcul  ISO 105-J03  $\Delta E_{cmc}(2:1)$	
		Canadian Average Green Vert canadien moyen	L* = 26.88 a* = -3.27 b* = 16.26	$\Delta E_{cmc} < 3$		
		Black Noir	L* = 18.67 a* = 0.37 b* = 1.13	$\Delta E_{cmc} < 3$		
		MT Brown Brun MT	L* = 40 a* = 6 b* = 16	$\Delta E_{cmc} < 3$		
		Sand Sable	L* = 54 a* = 4 b* = 16	$\Delta E_{cmc} < 3$		
	TW RBT	Canadian Average Green Vert canadien moyen	L* = 26.88 a* = -3.27 b* = 16.26	$\Delta E_{cmc} < 3$		
		Light Green Vert pâle	L* = 42.56 a* = -11.46 b* = 27.13	$\Delta E_{cmc} < 3$		
		Brown Brun	L* = 36.25 a* = 4.60 b* = 14.48	$\Delta E_{cmc} < 3$		
		Black Noir	L* = 18.67 a* = 0.37 b* = 1.13	$\Delta E_{cmc} < 3$		
	AR RA	Dark Sand Sable foncé	L* = 52 a* = 5.5 b* = 11	$\Delta E_{cmc} < 3$		
		Light Sand Sable pâle	L* = 63 a* = 2.5 b* = 19.5	$\Delta E_{cmc} < 3$		
		Brown Brun	L* = 34 a* = 6.5 b* = 11.5	$\Delta E_{cmc} < 3$		
	WO H/A	White Blanc	L* = 95.78 a* = -0.22 b* = -0.43	$\Delta E_{cmc} < 3$		
		Grey Gris	L* = 61.28 a* = -0.24 b* = -0.71	$\Delta E_{cmc} < 3$		
	<b>Specular Gloss</b>  <i>Brillant spéculaire</i>	MT MT	Olive Olive	$\leq 1$ unit/unité		
			Canadian Average Green Vert canadien moyen	$\leq 1$ unit/unité		
Black Noir			$\leq 1$ unit/unité			

Property Propriété	Colour Couleur	Requirement Exigence	Tolerance* Tolérance	Standard Norme		
		MT Brown <i>Brun MT</i>	≤ 1 unit/unité			
		Sand <i>Sable</i>	≤ 1 unit/unité			
	TW RBT	Canadian Average Green <i>Vert canadien moyen</i>	≤ 1 unit/unité			
		Light Green <i>Vert pâle</i>	≤ 1 unit/unité			
		Brown <i>Brun</i>	≤ 1 unit/unité			
		Black <i>Noir</i>	≤ 1 unit/unité			
	AR RA	Dark Sand <i>Sable foncé</i>	≤ 1 unit/unité			
		Light Sand <i>Sable pâle</i>	≤ 1 unit/unité			
		Brown <i>Brun</i>	≤ 1 unit/unité			
	WO H/A	White <i>Blanc</i>	≤ 5 units/unités			
		Grey <i>Gris</i>	≤ 5 units/unités			
Property Propriété	Colour Couleur	Requirement Exigence		Standard Norme		
Near Infrared Reflectance (NIRR) (750 – 1350 nm)  <i>Réflectance dans le proche infrarouge (RIR) (750 – 1350 nm)</i>	MT MT	Olive <i>Olive</i>	See Table II <i>Voir le tableau II</i>	Test Apparatus Specifications/ <i>Caractéristiques de l'appareil d'essai</i>  Type CIE calibrated double beam spectrophotometer/ <i>Spectrophotomètre à double faisceau étalonné par le CIE</i>  Reference Panel/Panneau <i>de référence</i> Compressed BaSO <sub>4</sub> or Spectralon/ <i>BaSO<sub>4</sub> comprimé ou Spectralon</i>  Measurement Optical Geometry/ <i>Géométrie optique de mesure</i> 8°/d (SPEX) or/ou 8°/t (SPIN)		
		Canadian Average Green <i>Vert canadien moyen</i>				
		Black <i>Noir</i>				
		MT Brown <i>Brun MT</i>				
		Sand <i>Sable</i>				
	TW RBT	Canadian Average Green <i>Vert canadien moyen</i>			See Table II <i>Voir le tableau II</i>	
		Light Green <i>Vert pâle</i>				
		Brown <i>Brun</i>				
						Spectral band/ <i>Bande spectrale</i> IR: 700 - 1350 nm UV: 250-400 nm
						Wavelength Accuracy/ $< \pm 0.1$ nm

Property <i>Propriété</i>	Colour <i>Couleur</i>	Requirement <i>Exigence</i>	Tolerance* <i>Tolérance</i>	Standard <i>Norme</i>		
	Black <i>Noir</i>	See Table III <i>Voir le tableau III</i>		<i>Précision des longueurs ondes</i> Wavelength Reproducibility/ <i>Reproductibilité des longueurs d'onde</i> <0.0023 Resolution/ <i>Résolution</i> <0.20 nm Spectral precision/ <i>Précision spectrale</i> ±0.30 nm Photometric precision/ <i>Précision photométrique</i> ±0.005 A		
	Dark Sand <i>Sable foncé</i>					
	Light Sand <i>Sable pâle</i>					
	Brown <i>Brun</i>					
	White <i>Blanc</i>				85%	± 10%
	Grey <i>Gris</i>				25%	± 10%
<b>Ultraviolet (UV) Reflectance (250-400 nm)</b>  <i>Réflexion des ultraviolets (UV) (250-400 nm)</i>	White <i>Blanc</i>	70%	± 10%			
	Grey <i>Gris</i>	NONE <i>Aucune</i>	NONE <i>Aucune</i>			
<b>Colour Fastness to light</b>  <i>Solidité des couleurs à la lumière</i>	All <i>Tous</i>	6 or better <i>6 ou plus</i>		ISO 105-B02:2014 Number of Specimens/ <i>Nombre de spécimens</i> 3 Exposure Cycle/ <i>Cycle d'exposition</i> A1 Exposure Method/ <i>Méthode d'exposition</i> 3		

\* **Tolerance:** refers to the acceptance tolerances that will be used for compliance evaluation when tolerance is not otherwise specified in product or textiles specifications or applicable contract documents.

\* *Tolérance:* fait référence aux tolérances d'acceptation qui seront utilisées pour l'évaluation de la conformité lorsque la tolérance n'est pas spécifiée par ailleurs dans les spécifications du produit ou des textiles ou les documents contractuels applicables.

Table II. Multi-Terrain Near Infrared Spectral Reflectance Requirements  
 Table II. Exigences relatives à la réflectance spectrale dans le proche infrarouge – Multi-Terrain

Wavelength <i>Longueur d'onde</i>	Olive / Olive			Canadian Average Green / Vert Canadien Moyen			Black / Noir			MT Brown / Brun MT			Sand / Sable		
	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>
750	34.94	44.94	54.94	22.75	35.95	49.15	0	3	8	13.5	18.5	23.5	36.8	46.8	51.8
800	40.41	50.41	60.41	26.04	40.33	54.62	0	3	8	14	19	24	38.5	48.5	53.5
850	43.12	53.12	63.12	27.6	42.5	57.39	0	3.01	8.01	14	19	24	40	50	55
900	43.89	53.89	63.89	28.17	43.11	58.06	0	3.13	8.13	14	19	24	41	51	56
950	43.3	53.3	63.3	27.94	42.64	57.33	0	3.33	8.33	14	19	24	42	52	57
1000	43.2	53.2	63.2	27.91	42.56	57.2	0	3.46	8.46	14	19	24	43	53	58
1050	46.89	56.89	66.89	30.3	45.51	60.73	0	3.54	8.54	14	19	24	44	54	59
1100	47.35	57.35	67.35	30.94	45.88	60.81	0	3.67	8.67	14	19	24	45	55	60
1150	41.08	51.08	61.08	26.76	40.86	54.97	0	3.8	8.8	14	19	24	46	56	61
1200	33.8	43.8	53.8	22.61	35.04	47.47	0	3.85	8.85	14	19	24	46.3	56.3	61.3
1250	36.58	46.58	56.58	24.96	37.26	49.57	0	3.92	8.92	14	19	24	46.7	56.7	61.7
1300	36.76	46.76	56.76	25.36	37.4	49.45	0	4.01	9.01	14	19	24	47	57	62
1350	32.69	42.69	52.69	22.83	34.15	45.47	0	4.07	9.07	15	20	25	47	57	62



Figure I. Multi-Terrain Near Infrared Spectral Reflectance Requirements  
*Figure I. Exigences relatives à la réflectance spectrale dans le proche infrarouge – Multi-Terrain*

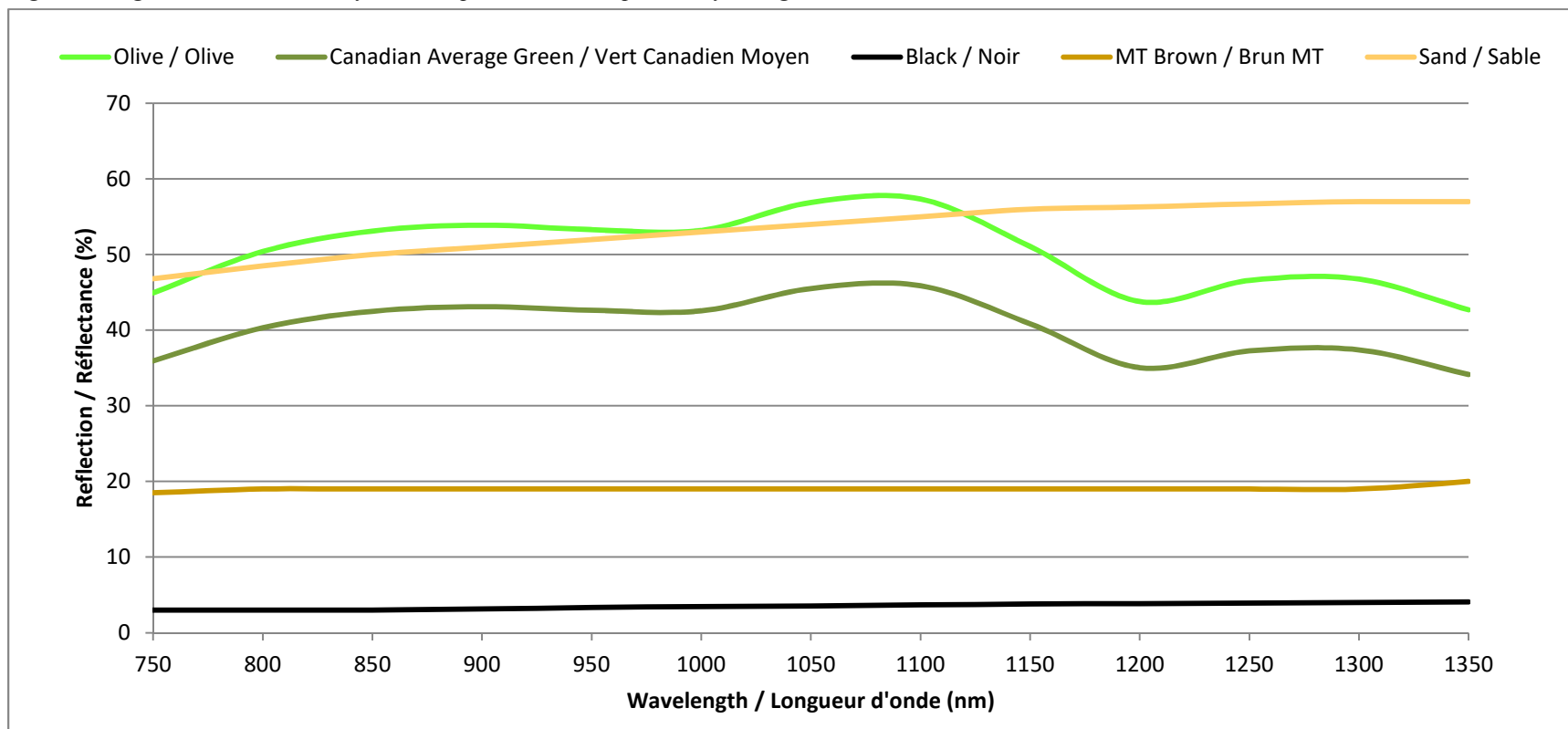


Table III. Temperate Woodland Near Infrared Spectral Reflectance Requirements  
Table III. Exigences relatives à la réflectance spectrale dans le proche infrarouge – RBT

Wavelength Longueur d'onde	Canadian Average Green / Vert canadien moyen			Light Green/Vert pâle			Brown/Brun			Black/Noir		
	lower tolerance tolérance inférieure	(%)	upper tolerance tolérance supérieure	lower tolerance tolérance inférieure	(%)	upper tolerance tolérance supérieure	lower tolerance tolérance inférieure	(%)	upper tolerance tolérance supérieure	lower tolerance tolérance inférieure	(%)	upper tolerance tolérance supérieure
750	22.75	35.95	49.15	28.43	44.94	61.44	28.43	44.94	61.44	1.00	3.00	8.00
800	26.04	40.33	54.62	32.55	50.41	68.28	32.55	50.41	68.28	1.00	3.00	8.00
850	27.60	42.50	57.39	34.50	53.12	71.74	34.50	53.12	71.74	1.01	3.01	8.01
900	28.17	43.11	58.06	35.21	53.89	72.57	35.21	53.89	72.57	1.13	3.13	8.13
950	27.94	42.64	57.33	34.93	53.30	71.67	34.93	53.30	71.67	1.33	3.33	8.33
1000	27.91	42.56	57.20	34.89	53.20	71.51	34.89	53.20	71.51	1.46	3.46	8.46
1050	30.30	45.51	60.73	37.87	56.89	75.91	37.87	56.89	75.91	1.54	3.54	8.54
1100	30.94	45.88	60.81	38.67	57.35	76.02	38.67	57.35	76.02	1.67	3.67	8.67
1150	26.76	40.86	54.97	33.45	51.08	68.72	33.45	51.08	68.72	1.80	3.80	8.80
1200	22.61	35.04	47.47	28.26	43.80	59.34	28.26	43.80	59.34	1.85	3.85	8.85
1250	24.96	37.26	49.57	31.20	46.58	61.96	31.20	46.58	61.96	1.92	3.92	8.92
1300	25.36	37.40	49.45	31.70	46.76	61.82	31.70	46.76	61.82	2.01	4.01	9.01
1350	22.83	34.15	45.47	28.53	42.69	56.84	28.53	42.69	56.84	2.07	4.07	9.07

Figure II. Temperate Woodland Near Infrared Spectral Reflectance Requirements  
Figure II. Exigences relatives à la réflectance spectrale dans le proche infrarouge – RBT

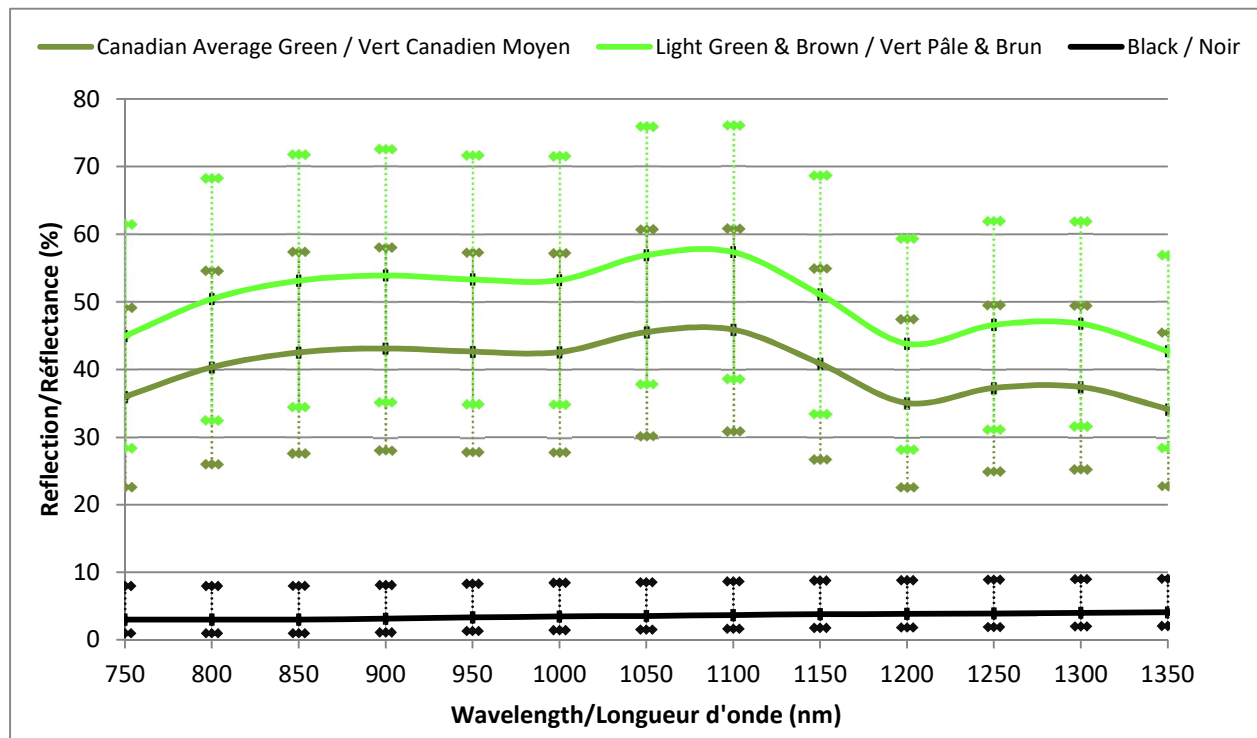
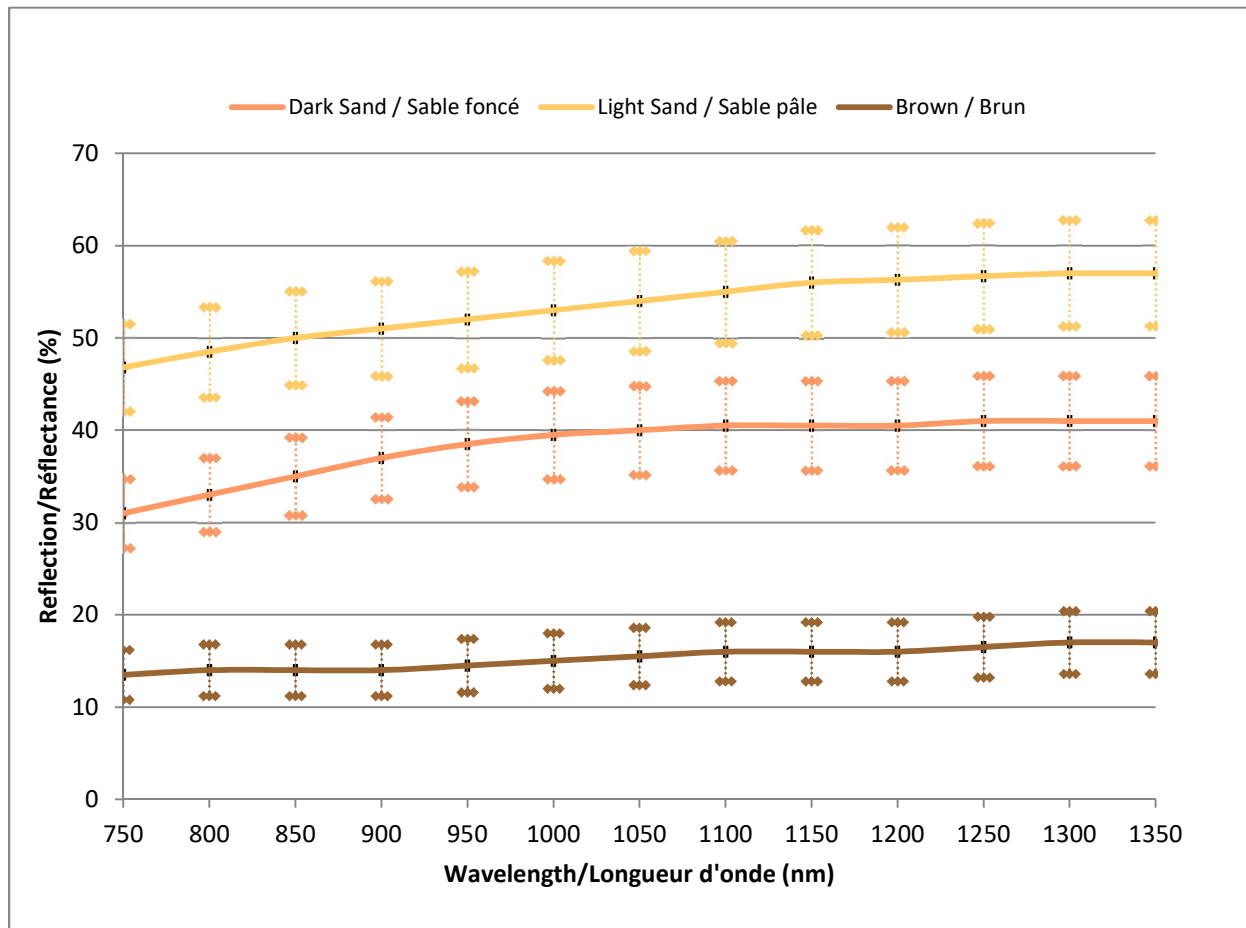


Table IV. Arid Near Infrared Spectral Reflectance Requirements  
Tableau IV. Exigences relatives à la réflectance spectrale dans le proche infrarouge – RA

Wavelength (nm) <i>Longueur d'onde</i>	Dark Sand / Sable foncé			Light Sand / Sable pâle			Brown / Brun		
	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>	lower tolerance <i>tolérance inférieure</i>	(%)	upper tolerance <i>tolérance supérieure</i>
750	27.3	31	34.7	42.1	46.8	51.5	10.8	13.5	16.2
800	29.0	33	37.0	43.7	48.5	53.4	11.2	14	16.8
850	30.8	35	39.2	45.0	50	55.0	11.2	14	16.8
900	32.6	37	41.4	45.9	51	56.1	11.2	14	16.8
950	33.9	38.5	43.1	46.8	52	57.2	11.6	14.5	17.4
1000	34.8	39.5	44.2	47.7	53	58.3	12.0	15	18.0
1050	35.2	40	44.8	48.6	54	59.4	12.4	15.5	18.6
1100	35.6	40.5	45.4	49.5	55	60.5	12.8	16	19.2
1150	35.6	40.5	45.4	50.4	56	61.6	12.8	16	19.2
1200	35.6	40.5	45.4	50.7	56.3	61.9	12.8	16	19.2
1250	36.1	41	45.9	51.0	56.7	62.4	13.2	16.5	19.8
1300	36.1	41	45.9	51.3	57	62.7	13.6	17	20.4
1350	36.1	41	45.9	51.3	57	62.7	13.6	17	20.4

Figure III. Arid Near Infrared Spectral Reflectance Requirements  
Figure III. Exigences relatives à la réflectance spectrale dans le proche infrarouge – RA



1. Package each hat in a polyethylene (or other transparent film) bag or envelope, made of material not less than one (1) mil thickness. The bags must be taped or stapled to effect closure and must be legibly marked (labelled) as follows:

NATO Stock Number (NSN) \* - As specified on contract  
Nomenclature (including size) \*\* - As specified on contract  
Quantity / Unit of Issue - 1 PR

2. A quantity of packages, of the same NSN, must be packed into a corrugated fibreboard box conforming to Canadian General Standards Board (CGSB) specification CAN/CGSB-43.22-2001. Overall inside dimensions (length, width and depth added) must not exceed 1.5 metres (59 inches). The maximum weight of the box and contents must not exceed 18 kilograms (40 pounds). The box size and content quantity must be uniform for the duration of the contract.

3. Closure of the corrugated fibreboard box must be in accordance with CGSB specification CAN/CGSB-43.22-2001 (Appendix B).

4. On one end of each corrugated fibreboard box, stencilling or labelling in figures as large as practicable in relation to the space available must legibly mark the following information:

NATO Stock Number (NSN) \* - As specified on contract  
Nomenclature (including size) \*\* - As specified on contract  
Quantity (per box) / Unit of Issue - \_\_\_ EA  
Gross Weight (nearest kg) - As applicable  
Contract Serial Number - As specified on contract

5. On one side of each corrugated fibreboard box, stencilling or labelling in figures as large as practicable in relation to the space available must legibly mark the following information:

Consignee - As specified on contract  
Consignor - Supplier's name or symbol  
Case \_\_\_ of \_\_\_ cases - As applicable within each shipment


6. The last shipping container of each shipment must have affixed to the side on which the shipping instructions are contained (paragraph 5), an envelope containing the Packing List, Release Note, etc. This water-resistant envelope must be prominently marked "Packing List Enclosed" and must be securely affixed to the outside wall of the container.

7. Shipments must be palletized in uniform loads (grouped by NSN) and strapped/secured on standard 4-way entry, 48-inch by 40-inch wood or fibreboard non-returnable pallets, to be supplied by the contractor. Total height, including pallet, must not exceed 47 inches.

\*Marking must be applied using Bar Code Symbology GS1-128 with AI 7001, including HRI (in accordance with D-LM-008-002/SF-001)

\*\*Bilingual format - English/French

Canadian Forces Transportation Packaging Order <h1 style="margin: 0;">CFTPO-HATS</h1>		Date 15 Mar 2017
As specified on contract		Sheet 1 of 2
Draftsman <b>H. Fraser</b> Checker <b>H. Fraser</b> Design Engineer <b>DSCO 5-4-3</b> Approval Stamp 	Nomenclature As specified on contract	Based on As specified on contract

<p>1. Emballer chaque chapeau dans un sac ou une enveloppe en polyéthylène (ou une autre pellicule transparente), dont l'épaisseur est d'au moins un (1) mil. Les sacs doivent être scellés à l'aide d'un ruban adhésif ou d'agrafes, et l'information suivante (inscrite sur une étiquette) doit figurer lisiblement sur chacun:</p> <p>Numéro de nomenclature OTAN (NNO)* - Selon le contrat Nomenclature (comprenant la taille) ** - Selon le contrat Quantité / Unité de mesure - 1 EA</p> <p>2. Une quantité de paquets, de la même NNO, doivent être placés dans un conteneur en carton dur ondulé, conformément à la norme CAN/CGSB-43.22-2001 de l'Office des normes générales du Canada (ONGC). Les dimensions générales intérieures (somme de la longueur, de la profondeur et de la hauteur) ne doivent pas dépasser 1,5 mètre (59 pouces). Le poids maximal du conteneur, avec son contenu, ne doit pas dépasser 18 kilogrammes (40 livres). La taille du conteneur et la quantité contenue doivent demeurer la même pour la durée du contrat.</p> <p>3. La fermeture du conteneur en carton dur ondulé doit être conforme à la norme CAN/CGSB-43.22-2001 (appendice B) de l'ONGC.</p> <p>4. Sur une extrémité de chaque conteneur en carton dur ondulé, l'information suivante doit figurer lisiblement en caractères aussi grands que permis par l'espace disponible (inscrite à l'aide d'un pochoir ou sur une étiquette) :</p> <p>Numéro de nomenclature OTAN (NNO)* - Selon le contrat Nomenclature (comprenant la taille) ** - Selon le contrat Quantité (par conteneur) / Unité de mesure - PR Poids brut (arrondir au kg) - Selon le cas Numéro de série du contrat - Selon le contrat</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Commande d'Emballage pour le Transport – Forces canadiennes</p> <h2 style="text-align: center;">CETFC-CHAPEAU</h2> <p style="text-align: center;">Date 15 mars 2017</p> <p style="text-align: center;">Feuille 2 of 2</p> <p style="text-align: center;">Nomenclature Selon le contrat</p> <p style="text-align: center;">Basé sur Selon le contrat</p>
<p>5. Sur un côté de chaque conteneur en carton dur ondulé, l'information suivante doit figurer lisiblement en caractères aussi grands que permis par l'espace disponible (inscrite à l'aide d'un pochoir ou sur une étiquette) :</p> <p>Destinataire - Selon le contrat Expéditeur - Nom ou marque du fournisseur Conteneur de - Selon chaque cargaison</p> <p>6. Le dernier conteneur d'expédition de chaque cargaison, doit porter sur le côté où l'on retrouve les instructions d'envoi (paragraphe 5), une enveloppe contenant le bordereau d'expédition, le bordereau de libération, etc. Cette enveloppe, résistante à l'eau, doit porter clairement les mots «bordereau d'expédition ci-inclus» et doit être bien fixée à la paroi extérieure du conteneur.</p> <p>7. L'entrepreneur doit fournir des palettes standard de type perdu, en bois ou en carton dur ondulé, accessibles des quatre côtés et mesurant 48 pouces sur 40 pouces. Les conteneurs doivent y être disposés uniformément (groupées par NNO) et solidement arrimées. La hauteur totale, y compris la palette, ne doit pas dépasser 47 pouces.</p> <p>* Les marques doivent être apposées au moyen de la symbologie code à barres GS1-128, avec le numéro d'identification d'application IA 7001, y compris la traduction en clair TC (conformément à la D-LM-008-002/SF-001)</p> <p>** Format bilingue – Anglais/ Français</p>	<p>Destinataire <b>H. Fraser</b></p> <p>Vérificatrice <b>H. Fraser</b></p> <p>Ingénieur d'études <b>DOCA 5-4-3</b></p> <p>Sceau d'approbation </p>



## 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.

# PRE-PRODUCTION AND PRODUCTION TECHNICAL VALIDATION PLAN FOR THE HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT™ TEMPERATE WOODLANDS (TW)

**NSN 8415-21-914-5176 A/A**

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OPI/BPR: DSSPM 2-3 / DAPES 2-3

**Canada**

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**PRE-PRODUCTION AND PRODUCTION TECHNICAL VALIDATION  
PLAN FOR HAT, SUN, TEMPERATE WEATHER, CADPAT™ TEMPERATE WOODLANDS (TW)**

**1. GENERAL.**

- 1.1 **Purpose.** The purpose of this document is to describe how The Department of National Defence (DND) will perform the pre-production technical evaluation of the temperate weather sun hat in CADPAT™ Temperate Woodlands (TW).
- 1.2 **General Method.** The DND Technical Authority (TA) with team of DND Subject Matter Experts (SMEs) will examine the Contractor provided documentary and physical evidence to confirm compliance with the technical requirements detailed in the Contract and its annexes.

**2. EVALUATION METHOD.**

- 2.1 **Pre-Production.** The TA and SMEs will evaluate the Contractor provided documentation and physical samples to confirm compliance with the Technical Specifications detailed in this Contract and its Annexes.
- 2.1.1 **Documentation.** The Contractor must submit all the Contract mandated documentation including the test results and Certificates of Compliance outlined in Table I.

**Table I – Mandatory Material Testing Information At Pre-Production**

Material	Reference	Testing Requirements and Frequency
		Pre-Production
Shell Material	Annex B, paragraph 3.3.1	Test report <sup>1</sup> for all of the requirements in accordance with D-80-001-023/SF-001 are required.

- 2.1.2 **Physical Samples.** The Contractor must submit the following samples outlined in Table II.

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<sup>1</sup> See Annex A (Statement of Work for Hat, Sun, Combat) for definition and document requirements for Test Reports.

**Table II – Physical Samples To Be Submitted – Pre-Production**

<b>Time Period</b>	<b>Requirements</b>
Pre-Production Stage	One (1) sample of the Hat made in accordance with Annex B (DSSPM 2-3-87-5176) is required. The size required at the pre-production stage must be Size 7.
Pre-Production Stage	One (1) full meter, full width fabric sample, in colour CADPAT™ TW conforming to D-80-001-023/SF-001.

2.1.3 **Workmanship and Construction Validation.** Workmanship and Construction will be evaluated using the criteria outlined in Table III.

2.1.4 **Validation Criteria Definitions.** The following definitions will be applied to the sample validation.

2.1.4.1 **Deviation.** A deviation is defined as a failure to meet an essential performance or design requirement outlined in **Annex B**. Samples must have no Deviations. Samples evaluated to contain a single workmanship or construction deviation will be deemed non-compliant and the Contractor will be required to produce a new pre-production sample within a time period detailed in the contract.

2.1.4.2 **Infraction.** An infraction is defined as a workmanship or construction issue evaluated to directly affect the serviceability of the end item. A maximum of three (3) workmanship and construction infractions will be accepted. Samples evaluated to contain more than three (3) infractions will be deemed non-compliant and the Contractor will be required to produce a new pre-production sample within a time period detailed in the contract.

2.1.4.3 **Observation.** An observation is defined as a workmanship or construction issue that does not necessarily affect serviceability of the end item but affects overall quality assurance. Observations will not impact compliance. However, observations noted and referenced in the pre-production evaluation must be corrected at production. **Workmanship or construction issues found with the submission not listed in Table III will be deemed as an observation.**



**Table III – Workmanship and Construction Evaluation**

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Cutting	Para 3.4.1	Hats must be cut using Government supplied patterns. Patterns include seam allowances but do not include make-up allowance. The contractor must be responsible for any change, which may be required for make-up allowance to suit production methods, but the design, grading, or requirements specified herein must not be changed.	X		
Cutting	Para 3.4.2	The shell parts of each hat must be cut in the direction of the warp as indicated on the pattern drawings.	X		
Cutting	Para 3.4.3	The shell parts of each hat must be cut from the same print run of material with the exception of the sweatband, the inside crown binding, and the inside pocket pieces.	X		
Sewing	Para 3.5.1	All stitching and seams must be in accordance with ISO 4915:1991 and ISO 4916:1991	X		
Sewing	Para 3.5.2	Seams must be a minimum of 3/8-inch (9.5 mm) wide unless otherwise specified	X		
Sewing	Para 3.5.3	All stitching must be lockstitch Type 301 with a minimum of 9 and maximum of 11 stitches per inch (3.5-4.3 stitches/cm). The serging may be done using any of the 500 series stitches and must have a minimum of 10 cover stitches per inch (4.0 stitches/cm).	X		
Sewing	Para 3.5.4	Bartacks must be 3/8-inch (9.5 mm) to 7/16-inch (11 mm) long with 22-24 stitches. They must not exceed a width of 3/32-inch (2.4 mm).	X		
Sewing	Para 3.5.5	The tension of the needle and bobbin threads must be adjusted to ensure proper stitching.	X		
Brim Construction	Para 3.6.1.1	The hat brim must be constructed of the following layers from top to bottom: 1 layer of shell material on the top, 1 layer of adhesive web, 1 layer of coated nylon, 1 layer of stiffener, and 1 layer of shell on the bottom.	X		

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Brim Construction	Para 3.6.1.2	The top shell layer and the coated-nylon layer must be fused together with the adhesive web. All layers must be placed together so that they are flush at the outside brim edge. The brim topstitching must have lines of stitching running parallel to the circumference of the brim. The stitching must be evenly spaced at 1/4-inch (6.4 mm) +/-1/16-inch (+/- 2 mm), and may be either separate rings or a spiral pattern.	X		
Brim Construction	Para 3.6.1.3	The outside edge of the brim must be bound with bias cut shell material to a finished width of 3/8-inch (9.5 mm). The binding must have a clean finish with no raw edges exposed. The binding must start and finish at the centre back, with the turned end of the binding lapped of a minimum of 1/2-inch (12.5 mm) on the opposite end of the binding.	X		
Hatband and Sidewall Assembly	Para 3.6.2	The hatband must be applied by folding and edge stitching 1/16-inch (2 mm), +/-1/16-inch (+/- 2 mm) the top edge of the hatband to the outside sidewall.	X		
Webbing Attachment	Para 3.6.3	The webbing must be placed on the center back of the hat, and hatband. The hatband has a mark indicating where the webbing must be anchored. At each mark, stitch through the webbing, the hatband and the sidewall with a straight stitch, 3 times. Stitching must not extend past webbing. Centre of the webbing must be on the centre back of the hat. Webbing must not lay flat on the band. Care must be taken to allow ease between the webbing bar tacking. There must be 1/8-inch (3.2 mm) to 1/4-inch (6.4 mm) ease allowed per loop. The phosphorescent 'Cat's-eye' assemblies must be fed onto the webbing prior to closure of the back seam.	X		

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Phosphorescent Tab Loop Assemblies	Para 3.6.4.1	Each loop must be constructed by folding each long edge in 3/8-inch (9.5 mm). One raw end of the loop must be folded up to within 1/4-inch (6.4 mm) of the other raw end, wrong sides together. The longer end must be folded down over the other raw edge, 1/4-inch (6.4 mm). The long edges must be topstitched 1/16-inch (1.5 mm) gauge.	X		
Phosphorescent Tab Loop Assemblies	Para 3.6.4.2	The phosphorescent strips must have finished dimensions of 1-inch (2.5 cm) wide by 1/2-inch (1.3 cm) long. The strips must be placed on top of the raw edges of the loops 1/8-inch (3.2 mm) from the folded edge. The phosphorescent strips must be edge stitched to the shell loops in a box formation. Thread must be tone to tone with the phosphorescent strips.	X		
Phosphorescent Tab Loop Assemblies	Para 3.6.4.3	The loop must be closed by folding it in half and securely edge stitching the short ends together. The loops must finish in accordance with the dimensions shown at figure 2. Loops must be fed onto the webbing. The loops must function such that they can be turned by hand into the desired position and not roll around the webbing freely.	X		
Phosphorescent Tab Loop Assemblies	Para 3.6.4.4	The centre back seams of the inside and outside sidewalls must be stitched 3/8-inch (9.5 mm) gauge and finished with the seam allowances facing each other. The webbing ends must be secured into the centre back seam.	X		
Screened Vents Attachment	Para 3.6.5	Two screened vents must be applied to each side of the hat. Care must be taken to affix them in accordance with the manufacturer's instructions and leaving no raw edges exposed. The vents must remain secure for the life of the hat.	X		
Inside Crown Pocket.	Para 3.6.6	The raw edges of the inside pocket pieces must be turned under twice and topstitched at 1/4-inch (6.4 mm) gauge. The pocket pieces must be lapped over each other to form the inside crown.	X		

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Inside Crown Pocket.	Para 3.6.6.1	The outer pocket edges, crown edge and top sidewall edges must be stitched together and the raw edges must be bias bound so that no raw edges are exposed.	X		
Inside Crown Pocket.	Para 3.6.6.2	The crown must be edge stitched through all layers from the top.	X		
Sweatband.	Para 3.6.7.1	The sweatband must consist of three layers. The outer layer must be shell material, the middle layer must be a sweat absorption interlining, and the next layer must be a cover interlining. The top edge of the shell layer must be serged and folded over the top edges of the interlinings 3/8-inch (9.5 mm). The folded edge must be edge stitched 1/16-inch (1.5 mm) gauge, catching all layers of the sweatband. The bottom edge of the shell layer must be folded over the bottom edges of the interlinings 3/8-inch (9.5 mm). The folded edge must be edge stitched 1/16-inch (2 mm) gauge, catching all layers of the sweatband.	X		
Sweatband.	Para 3.6.7.2	When finished, the right side back edge must be folded under and lapped over the left back edge and topstitched. Care must be taken to overlap the right side back approximately 3/4-inch (19 mm) from the centre back to reduce bulk.	X		
Sweatband.	Para 3.6.7.3	The bottom edges of the sidewall assembly must be stitched to the inside edge brim assembly at 3/8-inch (9.5 mm) gauge.	X		
Sweatband.	Para 3.6.7.4	The bottom long edge of the sweatband must be edge stitched to the sidewall and brim assembly seam allowance, ensuring that the ends of the chinstrap are secured in the stitching. The finished length of cording for the chinstrap must be 30-inches (76 cm) for all sizes.	X		

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Sweatband.	Para 3.6.7.5	The bottom edge of the outside hatband must be edge stitched through all layers ensuring that the sweatband is facing in and up.	X		
Sweatband.	Para 3.6.7.6	To secure the sweatband, single bar tacks must be placed at intervals for a total of seven bar tacks around the sweatband. The stitching must be done through all layers of the hat band and sweatband. Care must be taken to ensure that the sweatband is in the appropriate position while stitching through all layers.	X		
Sweatband.	Para 3.6.7.7	The toggle must be placed on the chinstrap ensuring that it is secured by knotting the end of the cording.	X		
Marking	3.7	<p><b>Marking and Label Information.</b> The following information and care symbols must be incorporated on the label (see paragraph 3.2.10). The label must be nominally 2-inches (5.0 cm) long by 1-1/4 inches (3.2 cm) wide.</p> <ul style="list-style-type: none"> <li>a. NATO Stock Number (NSN) that is specific for each size. NSN's will be designated in the contract by item and size;</li> <li>b. Size (twice the size of all other lettering);</li> <li>c. Contractor's identification or CA number;</li> <li>d. Contract Number;</li> <li>e. Month and year of manufacture (MM/YYYY);</li> <li>f. Space to write personal identification;</li> <li>g. Care Symbols in accordance with CAN/CGSB-86.1-2003 as follows: <ul style="list-style-type: none"> <li>1. Washing Symbol 6;</li> <li>2. Bleaching Symbol 3;</li> <li>3. Drying Symbol 2; and</li> <li>4. Ironing/Pressing Symbol 5</li> </ul> </li> </ul>		X	

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Marking	3.7.1	<b>Hang Tags.</b> No brand or product names must be permanently attached to the garment in any way. However, brand hang tags that are easily removed without causing damage to the product may be acceptable at no cost to the Crown, provided that approval for text and use has been granted by the Contracting Authority.		X	
Finishing.	Para 3.8	Following assembly, the hat must be steamed to remove wrinkles and to provide a uniform finish on the hat.	X		
Scale of Measurements.	Table I	The finished hat must meet the dimensional requirements stated in the Scale of Measurements in Table I. Following finishing, and prior to attaching the identification label, it must be verified that the size of the hat is within tolerance, according to the method defined in Annex B, Table I	X		

## 2.2 Production.

2.2.1 At the discretion of the Technical Authority, the Government of Canada reserves the right to conduct a validation inspection throughout the production period on delivered product to confirm a Contractor's continued ability to meet the mandated technical specifications. In addition to this general validation requirement, the Government of Canada requires the following specific testing to be conducted during production.

2.2.2 **For shell fabrics only.** For every 10,000 meters of production or upon supplier changes, the selected Contractor must produce the documentation identified in Table IV and the physical samples identified in Table V and the Contract. When a fabric sample is required, the sample must be clearly identified and traceable to production lots and part or reference numbers.

**Table IV – Mandatory Material Testing Information of the Shell Fabrics During Production**

<b>Material</b>	<b>Reference</b>	<b>Production Verification Requirements</b>
Shell Material in accordance with Annex B, paragraph 3.3.1	D-80-001-023/SF-001	For every 10,000 meters of production or upon supplier changes or upon colour changes:  Test report <sup>2</sup> must be submitted showing full testing in accordance with D-80-001-023/SF-001

**Table V - Physical Samples of the Shell Fabrics To Be Submitted During Production**

<b>Material</b>	<b>Reference</b>	<b>Pre-Production Verification Requirements</b>
Shell Material in accordance with Annex B, paragraph 3.3.1	D-80-001-023/SF-001	For every 10,000 meters of production or upon supplier changes or upon colour changes:  One (1) meter full width fabric sample in accordance with D-80-001-023/SF-001

2.2.3 **For components.** Upon supplier changes, the selected Contractor must submit the physical samples and documentation for evaluation as detailed in Table VI and the Contract.

**Table VI - Mandatory Material Testing Information of the Components During Production**

<b>Material</b>	<b>Reference</b>	<b>Production Verification Requirements</b>
Chin Strap	Annex B, paragraph 3.3.4	Certificate of Compliance (C of C) <sup>3</sup> for the properties listed in D-80-001-028/SF-001.

<sup>2</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.

<sup>3</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.

<b>Material</b>	<b>Reference</b>	<b>Production Verification Requirements</b>
Webbing	Annex B, paragraph 3.3.5	Certificate of Compliance (C of C) <sup>4</sup> for the properties listed in Annex B paragraph 3.3.5.
Screened Vent and Retention Washers	Annex B, paragraph 3.3.6	Certificate of Compliance (C of C) <sup>5</sup> for the properties listed in Annex B paragraph 3.3.6.
Toggle	Annex B, paragraph 3.3.7	Certificate of Compliance (C of C) <sup>6</sup> for the properties listed in Annex B paragraph 3.3.7.
Thread	Annex B, paragraph 3.3.8	Certificate of Compliance (C of C) <sup>7</sup> for the properties listed in Annex B paragraph 3.3.8
Luminescent Material	Annex B, paragraph 3.3.9	Certificate of Compliance (C of C) <sup>8</sup> for the properties listed in Annex B paragraph 3.3.9.

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<sup>4</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.

<sup>5</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.

<sup>6</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.

<sup>7</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.

<sup>8</sup> See Annex A (Statement of Work for Hat, Sun, Temperate Weather, Combat) for definition.



SIZE ROLL DISTRIBUTION /  
DISTRIBUTION DE TAILLE

RDIMS No. 5550386  
W8486-228407  
ANNEX G / ANNEXE G  
6 Aug / aout 2021

NSN / NNO	Nomenclature	Size / Grandeur	Unit of Issue	Total	Delivery Address / Destination		Priority by Size
			Unité de dotation		25 CFSD	7 CFSD	
8415-21-914-5176	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	A/A					
8415-21-914-5177	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	6 1/2	EA	0	0	0	TBD
8415-21-914-5178	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	6 5/8	EA	0	0	0	TBD
8415-21-914-5179	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	6 3/4	EA	0	0	0	TBD
8415-21-914-5180	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	6 7/8	EA	0	0	0	TBD
8415-21-914-5181	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7	EA	0	0	0	TBD
8415-21-914-5182	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 1/8	EA	0	0	0	TBD
8415-21-914-5183	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 1/4	EA	7628	4577	3051	TBD
8415-21-914-5184	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 3/8	EA	5004	3002	2002	TBD
8415-21-914-5185	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 1/2	EA	3406	2044	1362	TBD
8415-21-914-5186	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 5/8	EA	458	275	183	TBD
8415-21-914-5187	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 3/4	EA	0	0	0	TBD
8415-21-914-5188	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW) / CHAPEAU DE SOLEIL DE COMBAT POUR CLIMAT TEMPÉRÉ (CADPAT™ TW)	7 7/8	EA	230	138	92	TBD
<b>TOTAL:</b>				<b>16726</b>	<b>10036</b>	<b>6690</b>	



## NOTICE

This document has been examined by the Technical Authority for content and confirmed that it has no references to controlled goods.

# **BID TECHNICAL EVALUATION PLAN FOR THE HAT, SUN, TEMPERATE WEATHER, COMBAT, CADPAT™ TEMPERATE WOODLANDS (TW) NSN 8415-21-914-5176 A/A**

**Bid Technical Evaluation Plan For The Hat,  
Sun, Temperate Weather, Combat, CADPAT Temperate Woodlands (HSCTW)**

**1.0 SCOPE.**

1.1 **Purpose.** The purpose of this document is to describe how the Department of National Defence (DND) will perform the Bid Technical Evaluation for the temperate weather, CADPAT™ Temperate Woodlands Combat Sun Hat.

1.2 **General Method.** A team of DND Subject Matter Experts (SMEs) will examine the bidder provided documentary and physical evidence to confirm compliance with all the requirements detailed in the Request for Proposal and its supporting Annexes.

**2.0 TECHNICAL EVALUATION METHOD.**

2.1 **Context.** The Technical Evaluation methodology detailed below will be used to determine all the technically compliant bids.

**2.2 Bidder Provided Documentary and Physical Evidence.**

2.2.1 **Documentary Evidence.** Bidders must provide the mandatory material testing information identified in Table I.

**Table I – Bid Mandatory Material Testing Information**

Material	Reference	Bid Testing Requirements
Shell Material	Annex B, paragraph 3.3.1	Test Report <sup>1</sup> for the following properties listed in D-80-001-023/SF-001 and <b>Annex D</b> (DSSPM 3-6-80-001): <ol style="list-style-type: none"> <li>1. Colourfastness to Light;</li> <li>2. Colour (as received); and</li> <li>3. IRR (as received)</li> </ol>

<sup>1</sup> See Request For Proposal for definition.

Material	Reference	Bid Testing Requirements
Chin Strap	Annex B, paragraph 3.3.4	Certificate of Compliance (C of C) <sup>2</sup> for the properties listed in D-80-001-028/SF-001.
Webbing	Annex B, paragraph 3.3.5	Certificate of Compliance (C of C) <sup>3</sup> for the properties listed in Annex B paragraph 3.3.5.
Screened Vent and Retention Washers	Annex B, paragraph 3.3.6	Certificate of Compliance (C of C) <sup>4</sup> for the properties listed in Annex B paragraph 3.3.6.
Toggle	Annex B, paragraph 3.3.7	Certificate of Compliance (C of C) <sup>5</sup> for the properties listed in Annex B paragraph 3.3.7.
Thread	Annex B, paragraph 3.3.8	Certificate of Compliance (C of C) <sup>6</sup> for the properties listed in Annex B paragraph 3.3.8
Luminescent Material	Annex B, paragraph 3.3.9	Certificate of Compliance (C of C) <sup>7</sup> for the properties listed in Annex B paragraph 3.3.9.

2.2.2 **Physical Samples.** Bidders must submit the items identified in Table II as part of their bid.

2.2.2.1 Unless authorized by the Contracting Authority, bid physical samples must not bear any permanent markings that could identify the Bidder, their brand, or their product model.

<sup>2</sup> See Request For Proposal for definition.

<sup>3</sup> See Request For Proposal for definition.

<sup>4</sup> See Request For Proposal for definition.

<sup>5</sup> See Request For Proposal for definition.

<sup>6</sup> See Request For Proposal for definition.

<sup>7</sup> See Request For Proposal for definition.

2.2.2.2 By submitting Bid Physical Samples, a Bidder certifies that they originate from the same product lots and material lots for which Bid Certificates of Compliance and Bid Test Results were submitted. The Bidder also certifies that the Bid Physical Samples are equivalent (materials and manufacturing processes) to the specimens featured in the Bid Test Reports, such that if the Bid Physical Samples (or specimens taken from them) were subjected to the same testing, the results would be consistent with those in the Bid Test Reports.

2.2.2.3 When submitting Bid Physical Samples, Bidders must affix a tag to each one or secure them in a container (such as a box, bag or envelope). If no tags are used, identical Physical Samples may be placed in the same internal container. Each tag or container must include the following to identify the respective Sample(s):

- a. The solicitation number;
- b. An area at least 2-inches (5.0 cm) by 1-inch (2.5 cm) that is free of any markings or obstructions to allow the Contracting Authority to apply an alias for the parent bid; and
- c. Identifying information such as, but not limited to, abbreviated nomenclature or production lot number.

**Table II – Physical Samples To Be Submitted With The Bid**

Time Period	Requirement
By bid closing	One (1) Hat, Sun, Combat, CADPAT™ TW in size 7 made in accordance with Annex B.
By bid closing	One (1) meter, full width fabric sample in accordance with Annex B, paragraph 3.3.1.

2.3 **Technical Bid Evaluation Methodology.** The Technical Evaluation of bids will be conducted in two stages.

**2.3.1 Stage 1- Conformance to Materials to Mandated Specifications.**

2.3.1.1 The evaluators will examine the provided documentary evidence (as per paragraph 2.2.1) which will include the appropriate test results from accredited independent laboratories and Certificate(s) of Compliance (C of C) in order to determine the conformance of materials to the mandated specifications.

2.3.1.2 Non-compliant bids will not be considered further.

**2.3.2 Stage 2 – Quality of Workmanship and Conformance to Specified Materials and Measurements.**

2.3.2.1 The evaluators will examine the provided physical samples (as per paragraph 2.2.2) for the following:

- a. Quality of workmanship in accordance with the criteria outlined in Table III;
- b. Conformance to specified materials and measurements outlined in Annex B.

2.3.2.2 **Classification of Validation Criteria - Definitions.**

2.3.2.2.1 **Deviation.** A deviation is defined a failure to meet an essential performance or design requirement outlined in **Annex B.**

2.3.2.2.2 **Infraction.** An infraction is defined as a workmanship or construction issue evaluated to directly affect the serviceability of the end item.

2.3.2.2.3 **Observation.** An observation is defined as a workmanship or construction issue evaluated to be non-compliant that does not necessarily affect serviceability of the end item but affects overall quality assurance.

2.3.2.3 **Non-Compliance Criteria.**

2.3.2.3.1 **Deviations.** Samples must have no deviations. Samples evaluated to contain a single workmanship or construction deviation will be deemed non-compliant.

2.3.2.3.2 **Infractions.** A maximum of three (3) workmanship and construction infractions will be accepted. Samples evaluated to contain more than three (3) infractions will be deemed non-compliant. Infractions noted and referenced in the Bid Technical Evaluation must be correct at pre-production.

2.3.2.3.3 **Observations.** Observations will not impact compliance. However, observations noted and referenced must be corrected at pre-production. **Workmanship or construction issues found with the submission not listed in Table III will be deemed as an observation.**

2.3.2.4 Non-compliant bids will not be considered further.

**Table III – Workmanship and Construction Evaluation**

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Cutting	Para 3.4.1	Hats must be cut using Government supplied patterns. Patterns include seam allowances but do not include make-up allowance. The contractor must be responsible for any change, which may be required for make-up allowance to suit production methods, but the design, grading, or requirements specified herein must not be changed.	X		
Cutting	Para 3.4.2	The shell parts of each hat must be cut in the direction of the warp as indicated on the pattern drawings.		X	
Cutting	Para 3.4.3	The shell parts of each hat must be cut from the same print run of material with the exception of the sweatband, the inside crown binding, and the inside pocket pieces.		X	
Sewing	Para 3.5.1	All stitching and seams must be in accordance with ISO 4915:1991 and ISO 4916:1991.		X	
Sewing	Para 3.5.2	Seams must be a minimum of 3/8-inch (9.5 mm) wide unless otherwise specified		X	
Sewing	Para 3.5.3	All stitching must be lockstitch Type 301 with a minimum of 9 and maximum of 11 stitches per inch (3.5-4.3 stitches/cm). The serging may be done using any of the 500 series stitches and must have a minimum of 10 cover stitches per inch (4.0 stitches/cm).		X	
Sewing	Para 3.5.4	Bartacks must be 3/8-inch (9.5 mm) to 7/16-inch (11 mm) long with 22-24 stitches. They must not exceed a width of 3/32-inch (2.4 mm).		X	
Sewing	Para 3.5.5	The tension of the needle and bobbin threads must be adjusted to ensure proper stitching.		X	
Brim Construction	Para 3.6.1.1	The hat brim must be constructed of the following layers from top to bottom: 1 layer of shell material on the top, 1 layer of adhesive web, 1 layer of coated nylon, 1 layer of stiffener, and 1 layer of shell on the bottom.	X		

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Brim Construction	Para 3.6.1.2	The top shell layer and the coated-nylon layer must be fused together with the adhesive web. All layers must be placed together so that they are flush at the outside brim edge. The brim topstitching must have lines of stitching running parallel to the circumference of the brim. The stitching must be evenly spaced at 1/4-inch (6.4 mm) +/- 1/16-inch (+/- 2 mm), and may be either separate rings or a spiral pattern.	X		
Brim Construction	Para 3.6.1.3	The outside edge of the brim must be bound with bias cut shell material to a finished width of 3/8-inch (9.5 mm). The binding must have a clean finish with no raw edges exposed. The binding must start and finish at the centre back, with the turned end of the binding lapped of a minimum of 1/2-inch (12.5 mm) on the opposite end of the binding.		X	
Hatband and Sidewall Assembly	Para 3.6.2	The hatband must be applied by folding and edge stitching 1/16-inch (2 mm), +/-1/16-inch (+/- 2 mm) the top edge of the hatband to the outside sidewall.		X	
Webbing Attachment	Para 3.6.3	The webbing must be placed on the center back of the hat, and hatband. The hatband has a mark indicating where the webbing must be anchored. At each mark, stitch through the webbing, the hatband and the sidewall with a straight stitch, 3 times. Stitching must not extend past webbing. Centre of the webbing must be on the centre back of the hat. Webbing must not lay flat on the band. Care must be taken to allow ease between the webbing bar tacking. There must be 1/8-inch (3.2 mm) to 1/4-inch (6.4 mm) ease allowed per loop. The phosphorescent 'Cat's-eye' assemblies must be fed onto the webbing prior to closure of the back seam.		X	



Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Phosphorescent Tab Loop Assemblies	Para 3.6.4.1	Each loop must be constructed by folding each long edge in 3/8-inch (9.5 mm). One raw end of the loop must be folded up to within 1/4-inch (6.4 mm) of the other raw end, wrong sides together. The longer end must be folded down over the other raw edge, 1/4-inch (6.4 mm). The long edges must be topstitched 1/16-inch (1.5 mm) gauge.	X		
Phosphorescent Tab Loop Assemblies	Para 3.6.4.2	The phosphorescent strips must have finished dimensions of 1-inch (2.5 cm) wide by 1/2-inch (1.3 cm) long. The strips must be placed on top of the raw edges of the loops 1/8-inch (3.2 mm) from the folded edge. The phosphorescent strips must be edge stitched to the shell loops in a box formation. Thread must be tone to tone with the phosphorescent strips.		X	
Phosphorescent Tab Loop Assemblies	Para 3.6.4.3	The loop must be closed by folding it in half and securely edge stitching the short ends together. The loops must finish in accordance with the dimensions shown at figure 2. Loops must be fed onto the webbing. The loops must function such that they can be turned by hand into the desired position and not roll around the webbing freely.		X	
Phosphorescent Tab Loop Assemblies	Para 3.6.4.4	The centre back seams of the inside and outside sidewalls must be stitched 3/8-inch (9.5 mm) gauge and finished with the seam allowances facing each other. The webbing ends must be secured into the centre back seam.		X	
Screened Vents Attachment	Para 3.6.5	Two screened vents must be applied to each side of the hat. Care must be taken to affix them in accordance with the manufacturer's instructions and leaving no raw edges exposed. The vents must remain secure for the life of the hat.		X	
Inside Crown Pocket.	Para 3.6.6	The raw edges of the inside pocket pieces must be turned under twice and topstitched at 1/4-inch (6.4 mm) gauge. The pocket pieces must be lapped over each other to form the inside crown.		X	

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Inside Crown Pocket.	Para 3.6.6.1	The outer pocket edges, crown edge and top sidewall edges must be stitched together and the raw edges must be bias bound so that no raw edges are exposed.		X	
Inside Crown Pocket.	Para 3.6.6.2	The crown must be edge stitched through all layers from the top.		X	
Sweatband.	Para 3.6.7.1	The sweatband must consist of three layers. The outer layer must be shell material, the middle layer must be a sweat absorption interlining, and the next layer must be a cover interlining. The top edge of the shell layer must be serged and folded over the top edges of the interlinings 3/8-inch (9.5 mm). The folded edge must be edge stitched 1/16-inch (1.5 mm) gauge, catching all layers of the sweatband. The bottom edge of the shell layer must be folded over the bottom edges of the interlinings 3/8-inch (9.5 mm). The folded edge must be edge stitched 1/16-inch (2 mm) gauge, catching all layers of the sweatband.		X	
Sweatband.	Para 3.6.7.2	When finished, the right side back edge must be folded under and lapped over the left back edge and topstitched. Care must be taken to overlap the right side back approximately 3/4-inch (19 mm) from the centre back to reduce bulk.		X	
Sweatband.	Para 3.6.7.3	The bottom edges of the sidewall assembly must be stitched to the inside edge brim assembly at 3/8-inch (9.5 mm) gauge.		X	
Sweatband.	Para 3.6.7.4	The bottom long edge of the sweatband must be edge stitched to the sidewall and brim assembly seam allowance, ensuring that the ends of the chinstrap are secured in the stitching. The finished length of cording for the chinstrap must be 30-inches (76 cm) for all sizes.		X	
Sweatband.	Para 3.6.7.5	The bottom edge of the outside hatband must be edge stitched through all layers ensuring that the sweatband is facing in and up.		X	

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Sweatband.	Para 3.6.7.6	To secure the sweatband, single bar tacks must be placed at intervals for a total of seven bar tacks around the sweatband. The stitching must be done through all layers of the hat band and sweatband. Care must be taken to ensure that the sweatband is in the appropriate position while stitching through all layers.		X	
Sweatband.	Para 3.6.7.7	The toggle must be placed on the chinstrap ensuring that it is secured by knotting the end of the cording.			
Marking	3.7	<p><b>Marking and Label Information.</b> The following information and care symbols must be incorporated on the label (see paragraph 3.2.10). The label must be nominally 2-inches (5.0 cm) long by 1-1/4 inches (3.2 cm) wide:</p> <ol style="list-style-type: none"> <li>a. NATO Stock Number (NSN) that is specific for each size. NSN's will be designated in the contract by item and size;</li> <li>b. Size (twice the size of all other lettering);</li> <li>c. Contractor's identification or CA number;</li> <li>d. Contract Number;</li> <li>e. Month and year of manufacture (MM/YYYY);</li> <li>f. Space to write personal identification;</li> <li>g. Care Symbols in accordance with CAN/CGSB-86.1-2003 as follows: <ol style="list-style-type: none"> <li>1. Washing Symbol 6;</li> <li>2. Bleaching Symbol 3;</li> <li>3. Drying Symbol 2; and</li> <li>4. Ironing/Pressing Symbol 5</li> </ol> </li> </ol>			X
Marking	3.7.1	<p><b>Hang Tags.</b> No brand or product names must be permanently attached to the garment in any way. However, brand hang tags that are easily removed without causing damage to the product may be acceptable at no cost to the Crown, provided that approval for text and use has been granted by the Contracting Authority.</p>			X

Detail	Reference in Annex B	Criteria	Classification of Validation Criteria		
			Deviation	Infraction	Observation
Finishing.	Para 3.8	Following assembly, the hat must be steamed to remove wrinkles and to provide a uniform finish on the hat.		X	
Scale of Measurements.	Table I	The finished hat must meet the dimensional requirements stated in the Scale of Measurements in Table I. Following finishing, and prior to attaching the identification label, it must be verified that the size of the hat is within tolerance, according to the method defined in Annex B, Table I.		X	

**ATTACHMENT 1 to PART 3 - THE BID SOLICITATION**

**FINANCIAL BID**

With the exception of the firm quantities, the optional quantities are only estimations made in good faith and are not to be considered in any way as a commitment from Canada.

Applicable Taxes need to be provided however Applicable Taxes are outside of the Evaluated Price.

**Firm Quantity**

Item	Description	Unit of Issue	Quantity	Destination	Firm Unit Price, DDP, Applicable Taxes extra	Applicable Taxes (if any)
1	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW)	EA	6,690	Edmonton	\$ _____	
	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW)	EA	10,036	Montreal	\$ _____	

**Option Quantities**

Item	Description	Unit of Issue	Quantity	Destination	Firm Unit Price, DDP, Applicable Taxes extra, Optional Quantity			
					Y1	Y2	Y3	Y4
2	HAT, SUN, TEMPERATE WEATHER COMBAT (CADPAT™)	EA	66,904	Edmonton and/or Montreal	\$ _____	\$ _____	\$ _____	\$ _____

Y1 pricing applies within 24 months from Contract award.

Y2 pricing applies between 25 and 36 months from Contract award.

Y3 pricing applies between 37 and 48 months from Contract award.

Y4 pricing applies between 49 and 60 months from Contract award.

The options may be exercised for a minimum of 25% of the total maximum quantity per amendment, and up to 100% of the total maximum quantity for all amendments in total within 60 months after contract award.

For the purpose of establishing the evaluated aggregate price, the firm unit prices for item numbers 1 and an average yearly price for item 2 will be multiplied by the quantity of each item.

The resultant total for all evaluated prices will be added together to establish the evaluated aggregate price.

The table below illustrates an example on how the Evaluated Aggregate Price will be evaluated

**Firm Quantity**

Item	Description	Destination	Quantity	Firm Unit Price	Evaluated Price
1	HAT, SUN, TEMPERATE WEATHER, COMBAT (CADPAT™ TW)	Edmonton	6,690	\$10.00	\$66,900.00
		Montreal	10,036	\$10.00	\$100,360.00
				Firm Evaluated Price =	\$167,260.00

**Option Quantities**

Item	Description	Destination	Quantity	Firm Unit Price	Evaluated Price
2	HAT, SUN, COMBAT (CADPAT™)	Edmonton or Montreal	66,904	Y1 - \$10.00	
				Y2 - \$10.25	
				Y3 - \$10.50	
				Y4 - \$10.75	
		Options Evaluated Price = (Y1 + Y2 + Y3 + Y4) ÷ 4 = 10.38			\$694,463.52

Evaluated Aggregate Price = Firm Evaluated Price + Options Evaluated Price

## **ATTACHMENT 2 to PART 3 - BID SOLICITATION**

### **ELECTRONIC PAYMENT INSTRUMENTS**

*As indicated in Part 3, Clause 3.3.1, the Bidder must identify which electronic payment instruments they are willing to accept for payment on invoices*

The Bidder accepts any of the following Electronic Payment Instrument(s):

- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);

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## ATTACHMENT 3 to PART 5 - BID SOLICITATION

### FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\)-Labour's](#) website.

Date: \_\_\_\_\_(YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).
- A5. The Bidder has a combined workforce in Canada of 100 or more employees; and
  - A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

**OR**

- A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity](#) (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Bidder is not a Joint Venture.

**OR**

- B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)



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## **ATTACHMENT 4 TO PART 5 - BID SOLICITATION**

### **ETHICAL CONSIDERATIONS FOR PROCUREMENT OF APPAREL CERTIFICATION**

The Bidder certifies the following:

1. Child labour

The Bidder and its first-tier subcontractors do not employ child labour, i.e. work done by children who are younger than the minimum age for admission to employment indicated in applicable legislation in the country, and no younger than the age at which compulsory schooling has been set in applicable legislation in the country. In any event, children are protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. Employees younger than 18 shall not perform hazardous work, which includes work that may jeopardize their health, safety or morals.

2. Forced labour

The Bidder and its first-tier subcontractors do not use forced labour or compulsory labour in all its forms, including trafficking in persons for the purpose of forced or compulsory labour, namely any work or service that is exacted from any person under the menace of any penalty, and for which that person has not offered himself or herself voluntarily.

3. Abuse and harassment

The Bidder and its first-tier subcontractors treat their employees with dignity and respect. No employees shall be subject to any physical, sexual or verbal harassment, abuse or violence or psychological hazards. Corporal punishment is not used or tolerated in any form.

4. Discrimination

The Bidder and its first-tier subcontractors do not discriminate against their employees in hiring practices or any other term or condition of work (other than legitimate occupational requirements allowed by law) on the basis of race, national or ethnic origin, colour, religion, age, sex, sexual orientation, gender identity or expression, marital status, family status, genetic characteristics, disability or conviction of any offence for which a pardon has been granted or in respect of which a record of suspension has been ordered.

5. Freedom of association and collective bargaining

Where provided for by law, the Bidder and its first-tier subcontractors shall recognize and respect the right of employees to freely associate, organize and bargain collectively with their employer. No employee or worker representative shall be subject to discrimination, harassment, intimidation or retaliation as a result of his or her efforts to freely associate, organize or bargain collectively. Where the right to freedom of association is restricted under law, the Bidder and its first-tier subcontractors must provide workers alternative means of association, including effective means to express and remedy workplace grievances.

6. Occupational safety and health

The Bidder and its first-tier subcontractors provide workers with a safe and healthy work environment and, at minimum, comply with local and national health and safety laws. If residential facilities are provided to workers, they are safe and healthy.

7. Fair wages

The Bidder and its first-tier subcontractors provide wages and benefits which comply with all applicable laws and regulations and which match or exceed the local prevailing wages and benefits in the relevant industry or which constitute a living wage, whichever provides greater wages and benefits. Where compensation does not provide a living wage, the Bidder and its first-tier subcontractors shall ensure that real wages are increased annually to continuously close the gap with living wage.

#### 8. Hours of work

Except in extraordinary circumstances, the Bidder's and its first-tier subcontractors' employees are not required to work more than the lesser of (a) 48 hours per week and 12 hours overtime per week, or (b) the limits on regular and overtime hours allowed by the law of the country of manufacture.