

**MANUFACTURING DATA  
FOR  
COVERALL, CHEMICAL WARFARE (CW) PROTECTIVE, HORIZON 1,  
GENERAL PURPOSE OPERATIONAL & TRAINING, CADPAT™**

**1. SCOPE**

**1.1 Scope.** This Manufacturing Data covers the materials, design, construction and inspection requirements for Coverall, Chemical Warfare (CW) Protective, Horizon 1, General Purpose Operational & Training, CADPAT™.

**1.2 Classification.**

Type I	Coverall, CW, Horizon 1, GP Operational, CADPAT™, Temperate Woodland (TW) NSN 8415-20-008-3081
Type II	Coverall, CW, Horizon 1, GP Operational, CADPAT™, Arid Region (AR) NSN 8415-20-008-3132
Type III	Coverall, CW, Horizon 1, GP Training, CADPAT™, Temperate Woodland (TW) NSN 8415-20-008-3216
Type IV	Coverall, CW, Horizon 1, GP Training, CADPAT™, Arid Region (AR) NSN 8415-20-008-3253

**2. APPLICABLE DOCUMENTS**

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

**Specifications**

CF-B-854	Buttons, Nylon
4-GP-80Ma	Thread, Cotton
MIL-W-17337F	Nylon, Webbing
MIL-PRF-131J	Performance Specification for Barrier Materials, Water Vapour Proof, Grease Proof, Flexible, Heat-Sealable
MIL-D-3464	Desiccants, Activated, Bagged, Packaging Use

**Drawings**

Drawing CS-135	Eyelets, Telescopic
Drawing CS-154	Eyelet, Brass
Drawing 2811	45-ligne Strap and Button Assembly
Drawing 373118	Button, Nylon, Slotted, 30-ligne
Drawing 389556	Button, Bar, Plastic, 45-ligne
Drawing 8790166	Strap and Button Argt, 30-ligne, Type I
Drawing 385319	Container, Storage, Coverall, CW Protective

Copies of the above mentioned documents may be obtained from: **Department of National Defence, Ottawa, Ontario, K1A 0K2, Attention: DSCO 4-7-5**

**Note:** Materials required for the manufacture of this garment are detailed in paragraph 3.3.

**2.2 Other publications.** The following documents form part of this Manufacturing Data to the extent specified herein. Effective date must be that in effect on the date of manufacture. Source is as shown:

**Canadian General Standards Board Sales Unit  
11 Laurier Street  
Place du Portage, Phase III  
Hull, Québec K1A 1G6**

CAN/CGSB-4.2-M	Textile Test Methods
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## Appendix 1 to Annex A

Dated: 03 Jan 2018

CAN/CGSB-4.131-M	Cotton-covered or Polyester-covered Polyester Thread
CAN/CGSB-4.139	Polyester Staple Thread
CAN/CGSB-54.1-M	Stitches and Seams, Parts I and II
CAN/CGSB-86.1-2003	Care Labelling of Textiles

**2.3 Other documents.** The following documents form part of the Technical Data Package for Coverall, CW, Horizon 1, GP Op & Trng, CADPAT™.

D-80-001-028/SF-001	Specification for Cord, Plaited, Spun Synthetic Fibre
D-80-001-055/SF-001	Manufacturing Data for Label, Clothing and Equipment
A-A-55126B	Manufacturing Data for Tape, Fastener, Nylon, Hook and Loop
DSSPM 2-2-80-227	Specification for Cloth, Chemical Warfare (CW) Protective, Double Layer
DSSPM 2-2-80-231	Specification for Cloth, Chemical Warfare Training (CWT), Double Layer
DSSPM 3-6-80-001	Specification for CADPAT™
D-83-001-005/SF-001	Specification for Fasteners, Slide, Interlocking
CFTPO-Coveralls	CF Transportation Packaging Order

**2.4 Product Data Management (PDM) Package - Coverall Chemical Warfare Protective, Horizon 1.** The PDM Package form part of this Manufacturing Data. The PDM Package contain Figures, Views of Garment, Scale of Measurements and Pattern References. The Figures and Views are not to scale.

## **2.5 Sealed patterns.**

DSSPM 259-01	Guidance for CADPAT™ (TW) (requirements only) and Fabric construction guidance (outer layer)
DSSPM 253-02	Guidance for CADPAT™ (AR) (requirements only) and Fabric construction guidance (outer layer)
DSSPM 281-01	Colour guidance for Canadian Average Green
DSSPM 255-03	Cloth, Filter, Composite, Laminated or Bonded, with Activated Carbon, Chemical Warfare (CW) Protective

**2.6 Paper patterns.** Paper patterns are held under DSSPM 2-5 under computer identification code **CCWPH152**. Size 7040 will be used for tendering purposes.

## **2.7 Order of precedence.**

**2.7.1** In the event of any inconsistency between the contract and this manufacturing data, the contract must take precedence. In the event of any inconsistency within the technical data (i.e. within or between the manufacturing data, drawings, figures, and paper patterns), the contractor must contact the Design Authority or the Government Agency in charge of the contract documents.

## **3. REQUIREMENTS**

**3.1** Unless otherwise specified, this garment must be governed by the Scale of Measurements in PDM Package, page 3.

**3.2 Preproduction sample.** When specified in the contract, preproduction samples must be completely representative of the final production garment, being made from parts and materials as specified and by equipment and processes, which will be used in quantity production.

## **3.3 Materials**

**3.3.1 Shell material (outer layer) for operational garments.** The shell material for the operational garments must be Cloth, Chemical Warfare (CW) Protective, Double Layer conforming to Specification DSSPM 2-2-80-227 – Part A.

For Type I Canadian Disruptive Pattern (CAD PAT™) – Temperate Woodland (TW) in accordance with DSSPM 3-6-80-001

Specification for CADPAT™ and Sealed Patterns DSSPM 259-01 (for colour and construction)

For Type II Canadian Disruptive Pattern (CAD PAT™) – Arid Region (AR) in accordance with DSSPM 3-6-80-001 Specification for CADPAT™ and Sealed Pattern DSSPM 253-02 (for colour and construction)

**3.3.2 Barrier material (inner layer) for operational garments.** The barrier material for the operational garments must be Cloth, Chemical Warfare (CW) Protective, Double Layer conforming to Specification DSSPM 2-2-80-227 – Part B and Sealed Pattern DSSPM 255-03. The colour must conform to requirements in Specification DSSPM 2-2-80-227 – Part B, Para B 3.1.1.1.

**3.3.3 Shell material for training garments.** The shell material for the training garments must be Cloth, Chemical Warfare Training (CWT), Double Layer conforming to Specification DSSPM 2-2-80-231 – Part A.

For Type III Canadian Disruptive Pattern (CAD PAT™) – Temperate Woodland (TW) in accordance with DSSPM 3-6-80-001 Specification for CADPAT™ and Sealed Patterns DSSPM 259-01 (for colour and construction)

For Type IV Canadian Disruptive Pattern (CAD PAT™) – Arid Region (AR) in accordance with DSSPM 3-6-80-001 Specification for CADPAT™ and Sealed Pattern DSSPM 253-02 (for colour and construction)

**3.3.4 Barrier material for training garments.** The barrier material for the training garments must be Cloth, Chemical Warfare Training (CWT), Double Layer conforming to Specification DSSPM 2-2-80-231 – Part B and Sealed Pattern DSSPM 255-03. The colour must conform to requirements in Specification DSSPM 2-2-80-231 – Part B, Para B3.2.

**3.3.5 Slide fastener for front closure.** The slide fastener must be metal, Class 4, Type 13, with locking slider and conforming to D-83-001-005/SF-001. The length must be as specified in Scale of Measurements at page 3 of PDM Package. Metal parts must be brass, hinged, 4.5 cm  $\pm$  2 mm long. The colour of the tape must match the shell or black.

**3.3.6 Slide fastener for leg restraints.** The slide fasteners for the leg restraints must be monofilament (coil), Class 3, Type 1, conforming to D-83-001-005/SF001 with regular pull, and polyurethane coated to give it waterproof properties. The colour of the tape must match the shell or black. The length must be 14-inches (35.6 cm).

**3.3.7 Slide fastener for sleeve pocket.** The slide fastener for the sleeve pocket must be metal, Class 3, Type 1 with locking slider and conforming to D-83-001-005/SF-001. The length must be 6-inches (15.2 cm). The colour of the tape must match the shell or black.

**3.3.8 Side release buckle.** The buckle for the waist belt must be commercially available side release buckle, double adjustment, acetal, 1-1/2 inches (3.8 cm) in size. The colour must match the webbing colour used or be black. "Standard SR Dual Ladderloc", Part # 101-1150 from ITW Nexus, 195 Algonquin Road, Des Plaines, Illinois, 60016-6197, PH: 1-847-299-2222, or equivalent, is acceptable. One complete (1) buckle is required for each coverall.

**3.3.9 Elastic for back suppression and suspenders.** The elastic for the back suppression waist and the suspenders must be commercially available and in accordance with Table I. The colour must be black. The length for the back waist suppression elastic must be inserted to meet the suppression as indicated in the Scale of Measurements at page 3 of PDM Package relaxed and extended. The length for the suspender elastic must be as indicated in Table II.

**Table I - Requirements for the Elastic for Back Suppression and Suspenders**

Property	Test Methods	Specified Requirements	Minimum acceptable	Maximum acceptable
<b>Materials</b>		60% polyester / 40% rubber 62% polyester / 38% rubber	38% rubber	40% rubber
<b>Construction</b>		knitted	24 cords	25 cords
<b>Width</b>	4.1*	1-1/2-inches (3.8 cm)		
<b>Weight</b>	5.1*	49.80 to 56.69 m/kg	- 5%	+ 5%
<b>Dimensional stability</b>	ISO 675	3%		
<b>Elongation</b>	10*	125%	- 10%	+ 10%

\* CAN/CGSB-4.2-M Textile Test Methods

**Table II - Length Requirements for the Suspender Elastic**

SIZE	X-Short	Short	Reg.	Tall	X-Tall	XX-Tall
<b>ELASTIC LENGTH</b>	29" (73.6 cm)	30-1/2" (77.4 cm)	32" (81.2 cm)	33-1/2" (85 cm)	35" (88.9 cm)	36-1/2" (92.7 cm)

**3.3.10 Elastic for the stirrups.** The elastic for the stirrups must be commercially available and in accordance with the Table III. The length for the elastic must be 19-1/2 inches (49.5 cm) ± 1/4-inch (6.4 mm). The colour must be black.

**Table III - Requirements for Elastic Stirrups**

Property	Test Methods	Specified Requirements	Minimum acceptable	Maximum acceptable
<b>Materials</b>		60% polyester / 40% rubber 62% polyester / 38% rubber	38% rubber	40% rubber
<b>Construction</b>		knitted	16 cords	17 cords
<b>Width</b>	4.1*	1-inch (2.5 cm)		
<b>Weight</b>	5.1*	29 yds/pd (58 m/kg)	- 5%	+ 5%
<b>Dimensional stability</b>	ISO 675	3%		
<b>Elongation</b>	10*	125%	- 10%	+ 10%

\* CAN/CGSB-4.2-M Textile Test Methods

**3.3.11.1 Elastic cord.** The elastic cord for the face opening must be commercially available elastic cord in accordance with the requirements as specified in Table IV. The colour must be black. **A length of 23-1/2 inches (59.69 cm) is required.**

**Table IV - Requirements for the Elastic Cord**

Description	Requirements
Diameter	3.5
Weight	123.7 m/kg
Sheath	16 carriers
Core	16 ends of 34's square cut rubber
Pick per cm	28.4
Stretch	90% ±10%
Covered yarn	600D polyester

**3.3.11.2 Cordloc.** The Cordloc to be used is the GTSP Cordloc, TAN 499 (5674) for the AR (Arid Region) coveralls and the CAG 351 (Canadian Average Green) for the TW (Temperate Woodland) coveralls. P/N 350-6000

**3.3.12 Webbing.** The webbing must be 100% nylon tape in accordance with Specification MIL-W-17337F Amendment 1, Class 2, 1-inch (2.5 cm) wide for the front support and suspenders and 1-1/2 inches (3.8 cm) wide for the front waist belt. The length for the suspenders must be 27-inches (68.6 cm). The front support webbing must fit the front panel at the waist without pulling or tugging. The length for the front waist belt must be as specified in Table V. The colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01 for Type I & III, and Light Sand as shown in Sealed Pattern DSSPM 253-02 for Type II & IV.

**Table V - Webbing Length Requirements for the Front Waist Belt**

SIZE	32	36	40	44	48	52
<b>WEBBING LENGTH*</b>	18" (45.7 cm)	19" (48.2 cm)	20" (50.8 cm)	21" (53.3 cm)	22" (55.9 cm)	23" (58.4 cm)

\*Two of each webbing lengths are required for the production of one individual garment size.

**3.3.13 Hook and loop fastener tape.** The hook and loop fastener tape must be made in accordance with A-A-55126B, Type II, Class 1. The colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01 for Type I & III Coveralls, and Light Sand as shown in Sealed Pattern DSSPM 253-02 for Type II & IV Coveralls.

**3.3.14 Cord.** The cord for the slide fastener thongs and for the mask cord loop must be plaited cord of spun synthetic fibre, Type I, conforming to Specification D-80-001-028/SF-001. The colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01 for Type I & III, and Light Sand as shown in Sealed Pattern DSSPM 253-02 for Type II & IV.

**3.3.15 Insignias, Canadian flag.** Unless otherwise specified, the subdued Canadian flag, olive drab (NSN 8455-21-899-3380), used on the left shoulder tab, must be Government supplied.

**3.3.16 Buttons.** Buttons must be slotted nylon 30-ligne and 45-ligne, in accordance with Specification CF-B-854, Drawing #373118 for 30-ligne buttons and Drawing #389556 for 45-ligne buttons. The colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01 for Type I & III, and Light Sand as shown in Sealed Pattern DSSPM 253-02 for Type II & IV. One (1) 30-ligne button and four (4) 45-ligne buttons are required for each Coverall.

**3.3.17 Eyelets and washers.** The eyelets and washers must be brass or aluminium in accordance with Drawing #CS-135-5 and Drawing #CS-135-6 or with Drawing #CS-154-4. These items must have a black chemical finish. Four (4) eyelets are required for each Coverall.

**3.3.18 Thread.** The thread for seaming, stitching, buttonholes and bar tacks must be cotton-covered or polyester-covered, polyester thread (R50 tex) conforming to CAN/CGSB-4.131-M. When material with the CADPAT™ - Temperate Woodland design is being sewn, the colour of the thread must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01. When material with CADPAT™ - Arid Region design is being sewn; the colour of the thread must be Light Sand as shown on Sealed Pattern DSSPM 253-02.

Unless otherwise specified, all other garment components must be matched for thread colour.

**3.3.19 Thread for serging.** The thread for serging must be polyester staple thread (R27 tex) conforming to CAN/CGSB-4.139. The thread for seaming and serging must be polyester staple thread (R40 tex) conforming to CAN/CGSB-4.139. When material with the CADPAT™ - Temperate Woodland design is being serged the colour of the thread must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01. When material with CADPAT™ - Arid Region design is being sewn; the colour of the thread must be Light Sand as shown on Sealed Pattern DSSPM 253-02. Unless otherwise specified, all other garment components must be matched for thread colour.

**3.3.20 Buttonhole gimp.** The buttonhole gimp must be 100% cotton, 3-cord soft finish, R210 tex conforming to Specification 4-GP-80Ma, Type 2A. The colour must be Canadian Average Green in accordance with Sealed Pattern DSSPM 281-01 for Type I & III and Light Sand as shown on Sealed Pattern DSSPM 253-02 for Type II & IV.

**3.3.21 Labels.** A marking label in accordance with Manufacturing Data D-80-001-055/SF-001, a care label in accordance with CAN/CGSB-86.1-2003 and a record of laundering label must be sewn with the right leg cargo pocket flap (see 3.9 and 3.10). The colour for the labels must be white.

## **3.4 Cutting**

**3.4.13** The coverall will be cut using duplicates of Government supplied paper patterns. Paper patterns include seam allowance but do not include 'make-up' allowance. The contractor must be responsible for any changes which may be required for 'make-up' allowance to suit his production methods, but the design, grade or the requirements specified herein must not be changed.

**Note:** Paper patterns will not be supplied to contractors involved with special sizes, except upon request. In these instances the contractor must be responsible for adjusting the paper patterns to accommodate the measurements, stance, and figure of the individual to be fitted.

**3.4.14** The shell and liner parts of the coverall must be cut in the direction of the warp as shown on the paper patterns.

**3.4.15** The shell parts of each coverall must be cut from the same piece of shell material.

**3.4.16** The liner must be cut with the finished side towards the body.

**3.4.17** In view of the critical nature and purpose of this garment, particular attention must be given to the use of the best commercial standards and practices in all operations during cutting and construction.

**3.4.18** To ensure the protective integrity of this garment, punch holes SHALL NOT be utilized for marking the location of findings or component pieces.

**3.4.19** Punch holes SHALL NOT be utilized on the shell or liner.

**3.4.20** The specified materials must be cut and used in accordance with best commercial standards.

### **3.5 NIL**

### **3.6 Sewing**

**3.6.1** All seams must be in accordance with CAN/CGSB-54.1-M.

**3.6.2** Unless otherwise specified, all stitching must be either lockstitched Type 301 or lockchain stitch Type 401 conforming to CAN/CGSB-54.1-M having not less than 8 nor more than 10 stitches per inch (2.5 cm). The cut edges may be finished with stitches from stitch Type 501 to 505 Class and must be no less than 8 nor more than 10 stitches per inch (2.5 cm).

**3.6.3** Where double-lapped seams are specified, numeral designation 2.04.03 of CAN/CGSB-54.1-M must be used. They may be lock or lockchain stitched, with the needles set 1/4-inch (6.4 mm) apart. Other seams and stitches must be Class 300 lockstitched series of CAN/CGSB-54.1-M. **NOTE: As an option for double-lapped seams, seams can be seamed, serged and topstitched.**

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

**3.6.5** The ends of all lockstitched seams and stitching, also breaks in thread must be securely backstitched.

**3.6.6** The stitches must present a regular even appearance without fabric pucker and must be free from skips that may result from faulty machine tension or other stitching malfunctions.

**3.6.7** Where seaming, turning and stitching is specified, the edges must be properly worked out before stitching.

**3.6.8** Stitching MUST NOT run beyond stop points. Every effort must be made to minimize the needle penetration of material during construction.

**3.6.9** No reworking of the garments will be allowed. Evidence of reworking will be considered a basis for rejection of the finished product.

**3.6.10 Serging.** Serging must be done using a three-thread serger with not less than 10 stitches per inch (2.5 cm).

**3.6.11** Where seaming and serging is specified, this may be done in one or two operations.

**3.6.12 Hook and loop fastener tape.** Hook and loop fastener tape must be stitched around all edges twice (2) for additional strength, starting at 1/8-inch (3.2 mm) gauge with the second row of stitching at 3/16-inch (4.8 mm) gauge. This will allow one line of stitching to be in the hook and loop portion of the tape.

**3.6.12.1** When tapes wider than 1-inch (2.5 cm) are used, they must be stitched around all edges twice (2) for additional strength, starting at 1/8-inch (3.2 mm) gauge with the second row of stitching at 3/16-inch (4.8 mm) gauge and will also have an 'X' stitched in the box to reinforce the center.

**3.6.12.2** For best results, a ballpoint needle, size 110 (#18) should be used.

**3.6.13 Bartacks.** Unless otherwise specified, bartacks must be 1/2-inch (12.7 mm) long and must have not less than 20 cover stitches.

**3.6.14 Buttonholes.** Buttonholes must be either gimp reinforced eyelet type, with ends bartacked or fishtailed. The buttonholes must have no less than 22 stitches per inch (2.5 cm).

**3.6.15 Button and strap assemblies.** When specified, the assemblies must be in accordance with Drawing #2811 for 45-ligne buttons and Drawing #8790166 for 30-ligne buttons. The button straps may be either seam type numerical designation 8.06.02 or 8.19.01. The finished width must be 5/16-inch (7.9 mm). The straps must be attached with 3/8-inch (9.5 mm) long bartacks and must have no less than 15 cover stitches. When the button assembly is being positioned, the button must sit at the center of the strap, effecting proper closure with corresponding buttonhole.

### **3.7 Construction**

**3.7.1 Front.** Each front must have a chest pocket with a pencil pocket on the outside of the front wall, and must be finished with a covered-buttoning flap. The right upper chest must have a loop fastener tape for the nametag. The left front upper chest must have a square piece of loop fastener tape to attach with front opening and a rank tab with covered-buttoning closure.

**3.7.1.1** The center front raw edges and crotch edges must be serged. The serged edges of the center fronts must be turned under and stitched 1/4-inch (6.4 mm) gauge.

**3.7.1.2 Front chest pockets (View of Opened Pocket, Page 7 of PDM Package).** Each pocket must be made with one layer of shell material and finished with a facing made of one layer of shell material.

**3.7.1.2.1** The shell and facing must be seamed at 3/8-inch (9.5 mm) along the top edge, turned and stitched 1/4-inch (6.4 mm) gauge. The raw bottom edge of the facing must be turned inside and stitched 1/16-inch (1.6 mm) gauge.

**3.7.1.2.2 Pencil pocket.** A pencil pocket must be positioned on the front wall of the breast pockets.

**3.7.1.2.2.1** The pencil pocket must be made of one piece of shell material. The top edge must be turned under 1-inch (2.5 cm), with raw edge folded under and stitched 1/16-inch (1.6 mm) gauge.

**3.7.1.2.2.2** The front edge of the pencil pocket must be folded under, placed along the folding line of the pocket and stitched 1/16-inch (1.6 mm) gauge to the pocket. The remaining edge must be included in the serging of the front raw edge.

**3.7.1.2.3** The bellows cut must be seamed at 3/8-inch (9.5 mm) gauge and serged in one or two operations to form the box corners. The bottom edge of the pencil pocket must be secured in the front corner seam.

**3.7.1.2.4** The sides and bottom must be folded in line with the corner and stitched at 1/16-inch (1.6 mm) gauge to form the walls of the pocket.

**3.7.1.2.5** A button and strap assembly must be centered on the top of the pocket, effecting proper closure with the flap.

**3.7.1.2.6** With edges folded under, the pockets must be placed on the front panels, as indicated on paper patterns and stitched in place. A vertical bartack must be placed at each top corner of the pocket.

**3.7.1.3 Chest pocket covered buttoning flaps.** Each covered buttoning flap must consist of a flap and a buttoning flap. All must be made of shell material.

**3.7.1.3.1** With right sides together, the buttoning flap and buttoning flap facing must be seamed along the buttoning opening, turned inside out with corners properly worked out and stitched 1/8-inch (3.2 mm) gauge. A vertical buttonhole to fit a 45-ligne button must be placed 5/8-inch (15.9 mm) from the pointed end.

**3.7.1.3.2** With right sides together, the buttoning flap facing and flap facing must be seamed along each side of the flap facing at 3/8-inch (9.5 mm) gauge. **Note: Only the facings shall be caught in the stitching.** A bartack must be placed diagonally at both corners of the opening.

**3.7.1.3.3** With right sides together, the flap and flap facing must be seamed along the outside edge, turned and stitched 1/4-inch (6.4 mm) gauge. The buttoning flap must be sandwiched between the flap pieces during this operation and must be caught in the seam.

**3.7.1.3.4** The raw edge of the flap must be seamed to each front 3/4-inch (19.1 mm) above the pocket, folded down and stitched 1/4-inch (6.4 mm) gauge to enclose the raw edges.

**3.7.1.4 Rank tab (View of Underside Rank Tab, Page 6 of PDM Package).** The rank tab facing must be folded right sides together, seamed along the pointed end and turned inside out. The pointed end must be stitched 1/8-inch (3.2 mm) gauge.

**3.7.1.4.1** A buttonhole to accommodate a 30-ligne button must be centered 3/4-inch (19.1 mm) behind pointed end.

**3.7.1.4.2** The rank tab facing must be placed on the under piece of the rank tab, 1-inch (2.5 cm) behind raw pointed end and basted along each side for better handling.

**3.7.1.4.3** With right sides together, the rank tab must be seamed along the sides and pointed end, turned inside out and stitched 1/4-inch (6.4 mm) gauge. The sides of the tab facing must be caught in this seam.

**3.7.1.4.4** The rank tab must be placed on the left front panel, as indicated on paper pattern, seamed 1/4-inch (6.4 mm) gauge, folded up and stitched 1/4-inch (6.4 mm) gauge. A 30-ligne button and strap assembly must be sewn on the front panel to effect proper closure with the rank tab.

**3.7.1.5 Name tape.** A 6-inch long by 1-inch wide (15.2 cm by 2.5 cm) piece of loop fastener tape must be positioned on the right chest, as indicated on paper patterns, and stitched down as per Para 3.6.12.

**3.7.1.6 Front loop fastener tape.** A 1-inch (2.5 cm) square piece of loop fastener tape must be positioned on the left chest, as indicated on paper patterns and stitched as per Para 3.6.12.

**3.7.2 Belt loops.** Two belt loops 3/4-inch (19.1 mm) wide with a functional length of 2-1/4 inches (5.7 cm) must be made on a looping machine and placed

on each front panel, as indicated on paper patterns. The belt loops must be stitched and secured to the front panel with bartacks through the shell and a reinforcement layer of fabric.

**3.7.3 Shoulders.** The front and back must be seamed and serged together along the shoulder and topstitched 1/4-inch (6.4 mm) gauge. The shoulder seam may also be joined with a double-lapped seam. The back must overlap the front on the outside.

**3.7.4 Sleeves.** The sleeves must be set-in type sleeves with semi-bellows pockets. The bottom of the sleeves must have a suppression system with hook and loop fastener tape closure. The left sleeve must have a subdued Canadian flag sewn on a shoulder tab.

**3.7.4.1 Shoulder tab with Canadian flag (View of Shoulder Tab, Page 6 of PDM Package).** A tab of two layers of shell material must be seamed, turned and stitched 1/4-inch (6.4 mm) gauge. The finished size of the tab must be 2-1/4 inches long by 2-inches wide (5.7 cm by 5.1 cm).

**3.7.4.1.1** A 2-inch long by 2-inch wide (5.1 cm by 5.1 cm) piece of hook fastener tape must be centred under the bottom half of the tab and stitched down as per Para 3.6.12.

**3.7.4.1.2 Canadian flag.** The Canadian flag must be centered over the bottom half portion of the tab and stitched around all edges.

**3.7.4.1.3** The shoulder tab must be centred over the left sleeve cap and basted in place to facilitate joining. A 2-inch long by 2-inch wide (5.1 cm by 5.1 cm) piece of loop fastener tape must be seamed to the left sleeve cap as per Para 3.6.12.1. The tape must be placed to effect proper closure with the shoulder tab.

**3.7.4.2 Patches for chemical agent detector paper.** Two (2) 3-1/4 inches by 4-1/4 inches (8.3 cm x 10.8 cm) patches of barrier fabric, as specified in Specification DSSPM 2-2-80-227- Part B the raw edges must be turned under and topstitched to the right upper arm shell and the lower left arm shell, 1/8-inch (3.2 mm) gauge around all edges. The placement of the patches must be as indicated on pages 17 and 18 of PDM Package.

**3.7.4.3 Sleeve pockets (View of Left Sleeve Pocket, Page 6 of PDM Package).** The front edge of the sleeve pockets must be turned under to form a cover with a self-facing, 1-1/4 inch (3.2 cm) wide. The front edge of the cover must be double-needle topstitched. With the slide fastener centered under the cover and the slide fastener tape facing up, the inside tape must be double-needle stitched through all layers. The bellows corner must be seamed. **Note: The pocket must open from top to bottom.**

**3.7.4.3.1** Each pocket must be positioned on their respective sleeve. With the outer edges of the pocket and the ends of the slide fastener tape turned under, the remaining tape of the slide fastener must be double-needle stitched to the sleeve. The remaining edges of the pocket must be stitched 1/16-inch (1.6 mm) gauge to the sleeve. The lower wall of the pocket must be pleated and securely stitched for 1-1/4 inches (3.2 cm) at the bottom front corner of the pocket. A horizontal bartack must be placed along the top of the pocket opening and a vertical bartack must be placed along the bottom of the pocket opening.

**3.7.4.4 Suppression straps for sleeve cuffs.** Each suppression strap must be made of one layer of shell material. The strap must be folded in half, right sides together, seamed along each side 3/4-inch (19.1 mm) gauge and turned inside out. The strap must be stitched along the edges 1/8-inch (3.2 mm) gauge. A 3-1/2 inches long by 1-1/2 inches wide (8.9 cm by 3.8 cm) piece of hook fastener tape must be placed under the strap 3/8-inch (9.5 mm) from end and stitched down as per Para 3.6.12.1.

**3.7.4.4.1** The suppression strap must be basted to the side sleeve seam, with hook fastener facing the sleeve. Location must be as indicated on paper pattern.

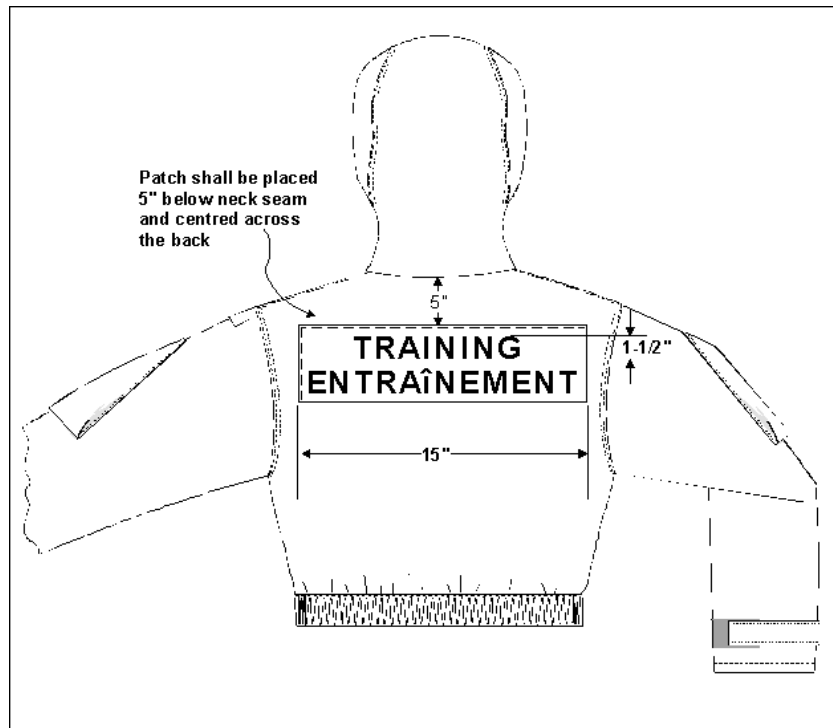
**3.7.4.4.2** A 6-inches long by 2-inches wide (15.2 cm by 5.1 cm) piece of loop fastener tape must be positioned on each sleeve bottom, as indicated on paper patterns, and stitched down as per Para 3.6.12.1.

**3.7.4.5 Armholes.** Each sleeve must be seamed, serged and topstitched 1/4-inch (6.4 mm) gauge to their respective armhole. The body must overlap the sleeve on the outside.

**3.7.4.6 Crotch seam.** The front panels must be seamed, serged and topstitched 1/16-inch (1.6 mm) gauge along the crotch seam. The left must overlap the right on the outside.

### **3.7.5 Back.**

**3.7.5.1 Back for training garments -Type III and IV.** A patch of shell material must be silk screened with the words 'TRAINING & ENTRAÎNEMENT' printed with block letters and with yellow regular ink. With raw edges folded under the patch must be centred on the back and stitched around all edges. The patch must be in accordance with the following drawing:



**3.7.5.2 Seat seam.** The back bottoms of the coverall must be seamed, serged and topstitched 1/4-inch (6.4 mm) gauge along the seat seam. The right must overlap the left on the outside. As an alternative, the seat seam may be double-needle stitched.

**3.7.5.3 Back waist seam.** The top back portion and back bottoms must be seamed, serged and topstitched 1/4-inch (6.4 mm) gauge along the back waistline. The top must overlap the bottom on the outside.

**3.7.5.3.1 Back waist attachment tabs.** Two (2) 3-inches long by 1-1/2 inches wide (7.6 cm by 3.8 cm) pieces of shell material remnants must be inserted into the back waist seam, centered 8-inches (20.3 cm) apart. The tabs must be included in the back waist seaming, serging and topstitching, as shown on page 14 of PDM Package. The tabs must remain inside the garment and will be attached to the suspenders on the liner barrier.

**3.7.5.4 Bottom leg suppression.** The bottom legs must have a waterproof slide fastener closure and suppression straps with hook and loop fastener tape closure.

**3.7.5.4.1 Suppression straps for leg bottoms (View of Right Side Seam Lower Leg Opening, Page 5 and 8 of PDM Package).** Each suppression strap must be made of one layer of shell material. The strap must be sewn per the length on the paper pattern. The strap must be folded in half, right sides together, seamed along each side 3/4-inch (9.1 mm) gauge and turned inside out. The strap must be stitched along the edges 1/8-inch (3.2 mm) gauge. A 4-1/2 inches long by 1-1/2 inches wide (11.4 cm by 3.8 cm) piece of hook fastener tape must be placed under the strap 3/8-inch (9.5 mm) from end and stitched down as per Para 3.6.12.1.

**3.7.5.4.2** The suppression strap must be basted to the leg inseam, with hook fastener facing the leg. Location must be as indicated on paper pattern.

**3.7.5.4.3** A 5-1/2 inches long by 2-inches wide (14 cm by 5.1 cm) piece of loop fastener tape must be positioned on each back leg bottom, as indicated on paper patterns, and stitched down as per Para 3.6.12.1.

**3.7.5.4.4** A 1-inch (2.5 cm) square piece of loop fastener tape must be placed on each front leg bottom, as indicated on paper pattern and stitched down as per Para 3.6.12.

**3.7.6 Side seams.** The front and back coverall must be seamed with a double-lapped seam along the underarm and side seams from cuff to bottom leg marking, leaving an opening for the leg suppression slide fastener. The back must overlap the front on the outside. As an alternative, the side seams may be seamed, serged and topstitched 1/4-inch (6.4 mm) gauge on separate layers.

**3.7.6.1 Side seam attachment tabs.** Two (2) 3-inches long by 1-1/2 inches wide (7.6 cm by 3.8 cm) pieces of shell material remnants must be inserted into each side seam, one below the armhole and the other centered over the waist seam. The tabs must be included in the side seaming, serging and topstitching, as shown on page 16 of PDM Package. The tabs must remain inside the garment. The underarm tabs must be attached to the liner barrier side seam below the armhole. The waist tabs must be attached to the liner barrier webbing at the waistline.

**3.7.6.2 Leg suppression slide fastener (View of Right Side Seam Lower Leg Opening, page 8 of PDM Package).** Each slide fastener must be placed face down to close at the hem in a downward direction on the right side of their respective leg bottoms and stitched into place.

**3.7.6.2.1 Leg suppression slide fastener fly.** The slide fastener fly for the leg suppression must be made of one layer of shell material, folded in half and one layer of barrier fabric insert. With right sides of the shell together, and the barrier layer on the outside, the fly must be stitched across both ends, turned inside out and stitched 1/8-inch (3.2 mm) gauge.

**3.7.6.2.2** The fly must be placed face down on the back leg panel, over the slide fastener and stitched into place. The fly must finish 1-1/2 inches (3.8 cm) above the raw leg bottom. A vertical bartack must be placed at the top front corner of the leg suppression opening, through shell and fly.

**3.7.6.3 Patch for chemical agent detector paper.** A 3-1/4 inches by 4-1/4 inches (8.3 cm x 10.8 cm) patch of barrier fabric, as specified in Specification DSSPM 2-2-80-227 – Part B, the raw edges must be turned under and topstitched to the right leg bottom shell, 1/8-inch (3.2 mm) gauge around all edges. The placement of the patches must be as indicated on page 18 of PDM Package.

**3.7.7 Leg thigh pockets (View of Thigh Pocket, Page 7 of PDM Package).** A cargo pocket must be placed on each side seam at thigh level. Each pocket must have a covered-buttoning flap. The bellows must be on the back of the leg.

**3.7.7.1** The pocket must be made of one layer of shell material. The top edge must be folded down 2-inches (5.1 cm) with raw edge folded under and stitched 1/16-inch (1.6 mm) gauge. The outer edges must be serged. The bellows cuts must be seamed and serged. Two eyelets must be placed in the lower edge of the pocket, as indicated on paper patterns.

**3.7.7.2 Leg cargo pocket button.** A 45-ligne button and strap assembly must be centered on the outside of the pocket to effect proper closure with the flap. The strap must be perpendicular to the top pocket opening.

**3.7.7.3** With back and bottom edges of the pocket folded under, the pocket must be stitched 1/16-inch (1.6 mm) gauge beginning 1-inch (2.5 cm) from the back top edge and ending 1-1/4 inch (3.2 cm) from the front bottom corner pocket edge. With the front pocket edge turned under and the top front corner pleated to form a bellows, the pocket must be stitched 1/16-inch (1.6 mm) gauge beginning 1-inch (2.5 cm) from the front top edge and ending 1-1/4 inches (3.2 cm) behind the bottom front pocket edge.

**3.7.7.4 Leg cargo pocket covered buttoning flaps.** Each flap must consist of a flap portion and a buttoning portion. All must be made of shell material.

**3.7.7.4.1** With right sides together, the buttoning flap and buttoning flap facing must be seamed along the buttoning opening, turned inside out with corners

properly worked out and stitched 1/8-inch (3.2 mm) gauge. A vertical buttonhole to fit a 45-ligne button must be placed 5/8-inch (15.9 mm) from pointed end.

**3.7.7.4.2** With right sides together, the buttoning flap facing and flap facing must be seamed along each side of the flap facing 3/8-inch (9.5 mm) gauge. **Note: Only the facings must be caught in the stitching.** A bartack must be placed at both corners of the opening.

**3.7.7.4.3** With right sides together, the flap must be seamed along the outer edges to the flap facing. The buttoning flap assembly must be sandwiched between the flap pieces during this operation and must be partially caught in the seam. The flap assembly must be turned inside out and stitched 1/4-inch (6.4 mm) gauge.

**3.7.7.4.4** The flap must be placed on the coverall, as indicated on paper patterns, seamed, turned down and stitched 1/4-inch (6.4 mm) gauge. Care must be taken to ensure flap effects proper closure with button assembly.

**3.7.7.5 Envelope fold.** The free side edges of the pocket must be stitched to the sides of the flap 1/4-inch (6.4 mm) gauge, to form an envelope fold. Both stitching must be secured with a bartack.

**3.7.8 Inseam.** The front and back bottoms must be joined together along the inseam with a double-lapped seam. The back must overlap the front on the outside.

**3.7.8.1 Inseam attachment tabs.** A 3 inch long by 1-1/2 inches wide (7.6 cm by 3.8 cm) piece of shell material remnants must be inserted into each inseam at the elastic stirrup level. The tabs must be included in the inseam double-lapped seaming, as shown on page 16 of PDM Package. The tabs must remain inside the garment and will be attached to the liner barrier seam allowance and elastic.

**3.7.9 Elasticized back waist.** With raw ends folded under, the back waist channel must be placed over the two pieces of waist webbing belt, overlapping the webbing for a distance of 1/2-inch (12.7 mm) and stitched across the width. The channel must be centered over the back waistline and stitched along the top and bottom 1/16-inch (1.6 mm) gauge. An elastic 1-1/2 inches wide (3.8 cm) by the required length (see Para 3.3.9) must be inserted into the channel, stretched and double needle stitched to the side seams across both ends of the channel through all plies.

**3.7.9.1 Waist belt.** The ends of the waist belt must be finished by double folding the raw edges under and securely stitching the fold. Each side of the waist belt must be threaded through their respective belt loop, and then threaded through their respective portion of a dual adjustment buckle.

**3.7.10 Suspenders.** The elastic must be placed on the wrong side of the suspender shell piece, with long edge folded over to cover the underside of the elastic. The back edge of the elastic must be stitched to the shell. The elastic must be placed without stretching for 1-inch (2.5 cm) from back end and securely stitched to the shell. The elastic must be stretched for 6-inches (15.2 cm) and stitched across the width of the elastic to secure it to the suspender shell.

**3.7.10.1** Starting at back end, the folded center edge must be topstitched 1/16-inch (1.6 mm) gauge, taking care to relax or stretch the elastic as dictated by the elastic placement. The remaining front edge must be stitched without stretching with elastic ending 1-1/2 inches (3.8 cm) from raw edge.

**3.7.10.2** A 27-inch (68.6 cm) long piece of 1-inch (2.5 cm) wide webbing tape must be inserted at the front end of the suspenders for 1-inch (2.5 cm). The front raw edges of the suspenders must be turned under, with excess fabric folded under the webbing and stitched 1/16-inch (1.6 mm) gauge along each side. The remaining centerfold must be seamed through to the end including webbing.

**3.7.10.3** The suspenders must cross at a distance of 8-inches (20.3 cm) from back end and securely stitched together through all plies to form a diamond shape.

**3.7.11 Back liner.** The back bottoms must be joined along the seat seam. With the suspenders centered 8-inches (20.3 cm) apart on the back waistline seam, the upper and lower back portion of the liner must be seamed together. The back end of the suspenders included in the seam must extend 1-inch (2.5 cm) into the seam allowance for future seaming with the attachment tabs in the shell.

**3.7.11.1 Front liner.** Each front panel must have a front support of webbing extending from the side seam into the front fly system. The length must be identical to the front panel width at the waist, plus 1/2-inch (12.7 mm) and must be placed to lie flat without pulling or bunching of fabric. 1/2-inch (12.7 mm) of webbing must extend beyond side seam attachment to the liner barrier. The webbing must be seamed across both ends and into the seam allowances only.

**3.7.11.2** The front liner must be reinforced at the crotch with a layer of shell material. With outside edges folded under the reinforcement pieces must be placed on their respective fronts and stitched 1/16-inch (1.6 mm) gauge to the liner. The front crotch must then be seamed together.

**3.7.11.3** The bottom legs each have elastic stirrups included into the liner. The length must be as specified in Para 3.3.9. The elastic must be placed on the right side of the back panels. The location must be as shown on page 8 of PDM Package. Both ends of the elastic must be basted to the liner in the seam allowances only.

**3.7.11.4** The liner front and back panels must be seamed together along the underarm and side seams. The front webbing must be included in this seam. The side seam must end at the bottom leg marking for the leg suppression system.

**3.7.11.5** The liner front and back panels must be seamed together along the inseam. The stirrup elastic must be included in this seam.

### **3.7.12 Joining shell and liner.**

**3.7.12.1 Leg suppression system (View of Lower Leg Opening, Page 8 of PDM Package).** With right sides together, the liner and shell leg bottoms must be placed and seamed along the leg suppression opening. The slide fastener, fly and elastic stirrup must be caught between the shell and liner. The assemblies must be turned inside out, properly worked out and stitched along the slide fastener 3/8-inch (9.5 cm) gauge through all layers.

### **3.7.13 Seaming of attachment tabs to barrier liner.**

**3.7.13.1 Inseam leg attachments (View of Inside Lower Leg Stirrup Attachment - Page 16 of PDM Package).** The elastic and barrier liner inseam must be double-stitched to the inseam attachment tabs, 1/2-inch (12.7 mm) to 3/4-inch (19.1 mm) from inseam stitching. To secure the assemblies, all stitching must be securely backstitched.

**3.7.13.2 Suspender attachments (View of Inside Back Waist Suspender Attachment - Page 14 and 15 of PDM Package).** The suspenders must be double-stitched to the waistline attachment tabs, 1/2-inch (12.7 mm) to 3/4-inch (19.1 mm) from back waist seam. To secure assemblies, all stitching must be securely backstitched.

**3.7.13.3 Underarm and side waist attachments (View of Inside Waist, and Underarm Attachment - Page 16 of PDM Package).** The barrier liner seam allowance below the armhole must be double-stitched to the underarm attachment tab, 1/2-inch (12.7 mm) to 3/4-inch (19.1 mm) from side seam stitching. The webbing at the side seam waist must be double-stitched to the side waist attachment tabs, 1/2-inch (12.7 mm) to 3/4-inch (19.1 mm) from side seam. To secure assemblies, all stitching must be securely backstitched.

**3.7.14 Hood shell.** The center hood piece and side hood pieces must be joined together with a double lapped seam. The center must overlap the sides on the outside.

**3.7.14.1 Hood reinforcement tab.** The hood tab must be made of one layer of shell material, folded in half, seamed along both sides, turned inside out and stitched 1/8-inch (3.2 mm) gauge. A 2-inch long by 2-inch wide (5.1 cm by 5.1

cm) piece of hook fastener tape must be centered under the hood tab and stitched down as per Para 3.6.12.1. The tab must be seamed to the right hood panel, as indicated on paper pattern.

**3.7.14.2 The Cord reinforcement patch.** The Cord reinforcement patch lining piece must be sewn onto the wrong side of the right front hood as indicated on the paper pattern. A small punch hole 3/16" must be made through both layers as indicated by the drill hole on the paper pattern. (The hood cord will extend through this hole.)

**3.7.14.3 Hood liner.** The center hood piece and side hood pieces must be seamed together.

**3.7.14.4** With right sides together, the hood shell and hood liner must be seamed along the right center front, along the hood face and left center, leaving a 7-inch (17.8 cm) opening along the left and right center fronts. The elastic cord must be placed along the face-opening seam and come out through the cord hole reinforced area on the right side front hood shell.

**3.7.14.5** The hood assembly must be turned inside out. The elastic must be pulled to the required length and stitched across the left front and the channel for the elastic must be stitched at 1/2-inch (12.7 mm) gauge. **Warning: The finished circumference of the face opening is critical to the protective qualities of the garment. Therefore, the opening must comply with the requirements of the measurements indicated on Page 12 of PDM Package.**

**3.7.14.6 Looping for Cordloc Assembly.** Looping is constructed from shell fabric, using matching color, width 1 ½ inch, Length 2 ½ inches. Measure and cut fabric to size. Fold width of fabric in half two times and sew down the length of both edges. Cordloc looping is located as per Page 11 of PDM Package and paper patterns.

**3.7.14.7** With the coverall assembly sandwiched between the hood shell and hood liner, the neckline must be seamed. The shell center fronts must be wrapped around their respective liner center fronts and included in this seam.

**3.7.14.8** The remaining edges of the left and right openings must be turned under and stitched close.

**3.7.14.9 Mask cord loop.** A 4-inches (10.2 cm) long cord, with ends heat fused, must be placed parallel to the elastic channel with perpendicular bartacks, as indicated on paper patterns.

**3.7.15 Front fly system.**

**3.7.15.1 Fly guard.** The fly guard must be wrapped around the center right front barrier and stitched 1/4-inch (6.4 mm) along the fold, from bottom of front opening and to the top of the front hood panel.

**3.7.15.1.1** A loop portion of a 1-inch (2.5 cm) wide fastener tape must extend the full length of the front opening from the crotch to the placement line indicated on the paper pattern piece for the right hood. The fastener tape must overlap the back edge of the slide fastener tape 1/8-inch (3.2 mm). The fastener tape and slide fastener must be placed to the forepart 1/16-inch (1.6 mm) gauge and stitched down as per Para 3.6.12. **To facilitate joining, the contractor may stitch the slide fastener and the fastener tape together before stitching to the front panel.**

**3.7.15.1.2** A loop fastener tape 1-inch wide by 2-1/2 inches long (2.5 cm by 6.4 cm) must be placed across the top of the slide fastener tape, over the hood tab edge and stitched down as per Para 3.6.12. (See View of Front Hood Tab Closure, Page 10 of PDM Package)

**3.7.15.2 Fly cover.** The cover must be folded right sides together, seamed across the bottom and turned inside out.

**3.7.15.2.1** A hook portion of 1-inch (2.5 cm) wide fastener tape must extend the full length of the front opening on the left front panel, to within 3/4-inch (19.1 mm) of the end of the hood flap. The tape must be placed on the underside of the forepart, 1/16-inch (1.6 mm) behind the front edge and stitched down as per Para 3.6.12.

**3.7.15.2.2** The slide fastener must be placed face down on the underside of the left forepart with the chain 1/4-inch (6.4 mm) behind the back edge of the fastener tape. The slide fastener must be stitched to the forepart 1/16-inch (1.6 mm) gauge and again at 5/16-inch (7.9 mm) gauge.

**3.7.15.2.3** A hook fastener tape 1-inch wide by 2-1/2 inches long (2.5 cm x 6.4 cm) must be placed across the top of the slide fastener tape, along the top edge of the fly cover and stitched down as per Para 3.6.12. (See View of Front Hood Tab Closure, Page 10 of PDM Package)

**3.7.15.2.4** The bottom of the front fly system must be stitched across the slide fastener tape and fly cover for the full width of the fly cover. (See View of Front Fly Bottom with Sliders and Pull Tabs, Page 13 of PDM Package)

**3.7.15.2.5** A 2-inch (5.1 cm) square piece of loop fastener must be placed at the top corner on the right side of the fly cover, and stitched down as per Para 3.6.12.1. (See View of Front Hood and tab Closure, Page 9 of PDM Package)

**3.7.16 Cuff finish.** The cuffs must be turned up 1-inch (2.5 cm) with raw edge turned under and stitched through all layers 1/16-inch (1.6 mm) gauge.

**3.7.17 Leg bottom finish.** The leg bottoms must be turned up 1-1/2 inches (3.8 cm) with raw edge turned under and stitched through all layers 1/16-inch (1.6 mm) gauge.

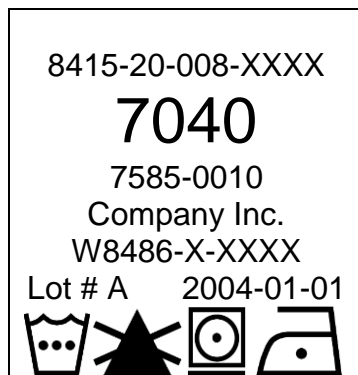
**3.8 Measurements.** Measurements must be in accordance with Views and Scales of Measurements in PDM Package).

**3.9 Marking label.** A marking label must be sewn with the right leg cargo pocket flap. The marking must be printed in black and shall give the following information printed in characters not less than 1/8-inch (3.2 mm) nor more than 1/4-inch (6.4 mm) in height, with the exception of the size identification, which shall be twice the height. The size and NATO stock number must be clearly visible and easy to read when the label is pulled out of the pocket.

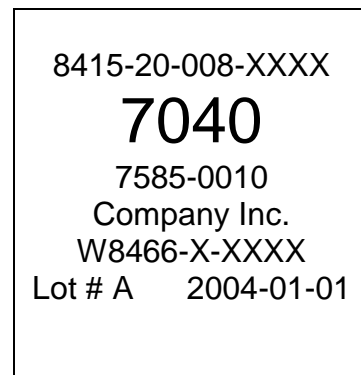
- a. NATO Stock Number;
- b. Size identification (Height /Chest);
- c. NATO size;
- d. Contractor's name, initials or recognized trademark;
- e. Contract number;
- f. Lot # and Manufacture date; and
- g. Care symbols (for training coveralls only).

Marking Label Examples:

Training Coverall



Operational Coverall



# Appendix 1 to Annex A

Dated: 03 Jan 2018

**Table VI – Size Roll for Type I Coverall, CW, Horizon 1, GP Op, CADPAT™ TW**

<b>Size (Height/ Chest)</b>	<b>NATO Size</b>	<b>Size Desc.</b>	<b>Stock number</b>
6432	5060-7585	x-short, x-small	8415-20-008-3082
6436	5060-8595	x-short, small	8415-20-008-3083
6736	6070-8595	short, small	8415-20-008-3112
6740	6070-9505	short, medium	8415-20-008-3084
6744	6070-0515	short, large	8415-20-008-3085
7036	7080-8595	regular, small	8415-20-008-3086
7040	7080-9505	regular, medium	8415-20-008-3087
7044	7080-0515	regular, large	8415-20-008-3088
7048	7080-1525	regular, x-large	8415-20-008-3089
7052	7080-2535	regular, xx-large	8415-20-008-3090
7336	8090-8595	tall, small	8415-20-008-3091
7340	8090-9505	tall, medium	8415-20-008-3092
7344	8090-0515	tall, large	8415-20-008-3093
7348	8090-1525	tall, x-large	8415-20-008-3094
7352	8090-2535	tall, xx-large	8415-20-008-3095
7356	8090-3545	tall, xxx-large	8415-20-008-3096
7640	9000-9505	x-tall, medium	8415-20-008-3097
7644	9000-0515	x-tall, large	8415-20-008-3098
7648	9000-1525	x-tall, x-large	8415-20-008-3099
7652	9000-2535	x-tall, xx-large	8415-20-008-3100
7656	9000-3545	x-tall, xxx-large	8415-20-008-3101
7940	0010-9505	xx-tall, medium	8415-20-008-3102
7944	0010-0515	xx-tall, large	8415-20-008-3103
7948	0010-1525	xx-tall, x-large	8415-20-008-3104
7952	0010-2535	xx-tall, xx-large	8415-20-008-3105
7956	0010-3545	xxx-tall, xxx-large	8415-20-008-3106

# Appendix 1 to Annex A

Dated: 03 Jan 2018

**Table VII– Size Roll for Type II Coverall, CW, Horizon 1, GP Op, CADPAT™ AR**

<b>Size (Height/ Chest)</b>	<b>NATO Size</b>	<b>Size Desc.</b>	<b>Stock number</b>
6432	5060-7585	x-short, x-small	8415-20-008-3133
6436	5060-8595	x-short, small	8415-20-008-3134
6736	6070-8595	short, small	8415-20-008-3135
6740	6070-9505	short, medium	8415-20-008-3136
6744	6070-0515	short, large	8415-20-008-3137
7036	7080-8595	regular, small	8415-20-008-3138
7040	7080-9505	regular, medium	8415-20-008-3139
7044	7080-0515	regular, large	8415-20-008-3140
7048	7080-1525	regular, x-large	8415-20-008-3141
7052	7080-2535	regular, xx-large	8415-20-008-3142
7336	8090-8595	tall, small	8415-20-008-3143
7340	8090-9505	tall, medium	8415-20-008-3144
7344	8090-0515	tall, large	8415-20-008-3145
7348	8090-1525	tall, x-large	8415-20-008-3146
7352	8090-2535	tall, xx-large	8415-20-008-3147
7356	8090-3545	tall, xxx-large	8415-20-008-3148
7640	9000-9505	x-tall, medium	8415-20-008-3149
7644	9000-0515	x-tall, large	8415-20-008-3150
7648	9000-1525	x-tall, x-large	8415-20-008-3151
7652	9000-2535	x-tall, xx-large	8415-20-008-3152
7656	9000-3545	x-tall, xxx-large	8415-20-008-3153
7940	0010-9505	xx-tall, medium	8415-20-008-3154
7944	0010-0515	xx-tall, large	8415-20-008-3155
7948	0010-1525	xx-tall, x-large	8415-20-008-3156
7952	0010-2535	xx-tall, xx-large	8415-20-008-3157
7956	0010-3545	xxx-tall, xxx-large	8415-20-008-3158

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Dated: 03 Jan 2018

**Table VIII – Size Roll for Type III Coverall, CW, Horizon 1, GP Trg, CADPAT™ TW**

<b>Size (Height/ Chest)</b>	<b>NATO Size</b>	<b>Size Desc.</b>	<b>Stock number</b>
6432	5060-7585	x-short, x-small	8415-20-008-3217
6436	5060-8595	x-short, small	8415-20-008-3218
6736	6070-8595	short, small	8415-20-008-3219
6740	6070-9505	short, medium	8415-20-008-3220
6744	6070-0515	short, large	8415-20-008-3221
7036	7080-8595	regular, small	8415-20-008-3222
7040	7080-9505	regular, medium	8415-20-008-3223
7044	7080-0515	regular, large	8415-20-008-3224
7048	7080-1525	regular, x-large	8415-20-008-3225
7052	7080-2535	regular, xx-large	8415-20-008-3226
7336	8090-8595	tall, small	8415-20-008-3227
7340	8090-9505	tall, medium	8415-20-008-3228
7344	8090-0515	tall, large	8415-20-008-3229
7348	8090-1525	tall, x-large	8415-20-008-3230
7352	8090-2535	tall, xx-large	8415-20-008-3231
7356	8090-3545	tall, xxx-large	8415-20-008-3232
7640	9000-9505	x-tall, medium	8415-20-008-3233
7644	9000-0515	x-tall, large	8415-20-008-3234
7648	9000-1525	x-tall, x-large	8415-20-008-3235
7652	9000-2535	x-tall, xx-large	8415-20-008-3236
7656	9000-3545	x-tall, xxx-large	8415-20-008-3237
7940	0010-9505	xx-tall, medium	8415-20-008-3238
7944	0010-0515	xx-tall, large	8415-20-008-3239
7948	0010-1525	xx-tall, x-large	8415-20-008-3240
7952	0010-2535	xx-tall, xx-large	8415-20-008-3241
7956	0010-3545	xxx-tall, xxx-large	8415-20-008-3593

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Dated: 03 Jan 2018

**Table IX – Size Roll for Type IV, Coverall, CW, Horizon 1, GP Trg, CADPAT™ AR**

<b>Size (Height/ Chest)</b>	<b>NATO Size</b>	<b>Size Desc.</b>	<b>Stock number</b>
6432	5060-7585	x-short, x-small	8415-20-008-3255
6436	5060-8595	x-short, small	8415-20-008-3256
6736	6070-8595	short, small	8415-20-008-3257
6740	6070-9505	short, medium	8415-20-008-3258
6744	6070-0515	short, large	8415-20-008-3259
7036	7080-8595	regular, small	8415-20-008-3260
7040	7080-9505	regular, medium	8415-20-008-3261
7044	7080-0515	regular, large	8415-20-008-3262
7048	7080-1525	regular, x-large	8415-20-008-3263
7052	7080-2535	regular, xx-large	8415-20-008-3264
7336	8090-8595	tall, small	8415-20-008-3265
7340	8090-9505	tall, medium	8415-20-008-3266
7344	8090-0515	tall, large	8415-20-008-3267
7348	8090-1525	tall, x-large	8415-20-008-3268
7352	8090-2535	tall, xx-large	8415-20-008-3269
7356	8090-3545	tall, xxx-large	8415-20-008-3270
7640	9000-9505	x-tall, medium	8415-20-008-3271
7644	9000-0515	x-tall, large	8415-20-008-3272
7648	9000-1525	x-tall, x-large	8415-20-008-3273
7652	9000-2535	x-tall, xx-large	8415-20-008-3274
7656	9000-3545	x-tall, xxx-large	8415-20-008-3275
7940	0010-9505	xx-tall, medium	8415-20-008-3276
7944	0010-0515	xx-tall, large	8415-20-008-3277
7948	0010-1525	xx-tall, x-large	8415-20-008-3278
7952	0010-2535	xx-tall, xx-large	8415-20-008-3279
7956	0010-3545	xxx-tall, xxx-large	8415-20-008-3280

## **Appendix 1 to Annex A**

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**3.10 Care labelling for training garments.** Care symbols for the training garments must be in accordance with CAN/CGSB-86.1-2003 as follows:

- |    |                            |          |                                      |
|----|----------------------------|----------|--------------------------------------|
| 1. | Table 1, Washing Symbols   | Symbol 6 | not exceeding 50° C,                 |
| 2. | Table 2, Bleaching Symbols | Symbol 3 | no bleach,                           |
| 3. | Table 3, Drying Symbols    | Symbol 4 | tumble dry, not exceeding 55° C, and |
| 4. | Table 4, Ironing/Pressing  | Symbol 3 | not exceeding 110° C.                |

**3.11 Care labelling for operational garments.** Care instructions for the operational garments must be bilingual with the following information. The length of the label must be long enough to allow for all of the record of number of launderings to be visible when the label is hanging outside of the pocket but with the pocket flap hanging down. Care symbols for the operational garments must be in accordance with CAN/CGSB-86.1-2003 as follows:

- |    |                             |          |                                      |
|----|-----------------------------|----------|--------------------------------------|
| 1. | Table 1, Washing Symbols    | Symbol 6 | not exceeding 50° C,                 |
| 2. | Table 2, Bleaching Symbols  | Symbol 3 | no bleach,                           |
| 3. | Table 3, Drying Symbols     | Symbol 1 | tumble dry, not exceeding 75° C, and |
| 4. | Table 4, Ironing / Pressing | Symbol 3 | not exceeding 110° C.                |

Care Label Example for Operational Coveralls

<div style="display: flex; justify-content: space-around; align-items: center;">     </div>	
1. DO NOT REMOVE THIS LABEL.	1. N'ENLEVEZ PAS CETTE ETIQUETTE.
2. Launder in accordance with B-GJ-005-311/FP-004, Chapter 3.	2. Lavez conformément à B-GJ-005-311/FP-004, chapitre 3.
3. Laundering reduces cumulative wear time. Refer to with B-GJ-005-311/FP-003, Chapter 3 for guidance.	3. Le lavage diminue le temps cumulatif d'usage. Consultez avec B-GJ-005-311/FP-004 chapitre 3 pour direction.
4. INDICATE LAUNDERINGS REMAINING BY CUTTING OFF THE BOTTOM PORTION OF THIS LABEL <u>AFTER EACH LAUNDERING IS COMPLETED.</u>	4. INDIQUEZ CE <u>QUI RESTENT</u> EN COUPANT LE BAS DE CETTE ETIQUETTE <u>APRÈS LE LAVAGE.</u>
LAUNDERED FIVE (5) TIMES	LAVÉ CINQ (5) FOIS
LAUNDERED FOUR (4) TIMES	LAVÉ QUATRE (4) FOIS
LAUNDERED THREE (3) TIMES	LAVÉ TROIS (3) FOIS
LAUNDERED TWICE (2)	LAVÉ DEUX (2) FOIS
LAUNDERED ONCE	LAVÉ UNE FOIS

**3.11.1 Finishing.** The Coverall must be cleaned, smoothed and folded IAW CFTPO Coveralls.