



PAKISTAN NAVY SPECIFICATION No.06/2024  
PROMULGATION DATE: 21 MARCH 2025

## **FABRIC OF JACKET BLACK**

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**PROMULGATION ORDER**

1. This specification is hereby approved and promulgated for information, guidance and compliance by the relevant person.
2. The details contained in the specification are to be studied, interpreted and implemented with due regards to the interest of the Service.

**SUGGESTIONS FOR AMENDMENT**

1. The specification has been prepared to bring the test methods and procedures in line with up-to-date PN requirements and facilities held in Pakistan. CINS may request to amend any test requirement/ test procedure in light of the experience emanating from its inspection history, through the feedback form placed at Annex E. However, such an alteration will be effective when the amendment is promulgated by this Directorate, and will be effective on the contracts which materialize after the promulgation date of respective amendment.

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**PN SPECIFICATIONS NO 06/2024**  
**(FABRIC OF BLACK JACKET)**

**0101. DESIGNATION**

1. Fabric Used for Black Jacket.

**0102. USAGE**

1. Fabric is being used to manufacture Black Jacket of Naval Officers.

**0103. INTRODUCTION**

1 This specification is prepared by Directorate of Indigenous Technical Development, Karachi, to provide necessary guidance to the potential manufacturers/ suppliers of the items mentioned herein. This specification is to be used for testing and deciding upon acceptance, or otherwise, of the items mentioned. Any alteration or addition in this specification can be suggested to ITD Directorate. However, it cannot be implemented without prior approval of DCLS.

2. This specification includes **05** Annexes and consists **21** pages, including the cover.

**0104. SCOPE**

1. This specification covers the technical/ manufacturing requirements of Fabric used for Black Jacket. Same are to be worn by Officers of Pakistan Navy. It defines and lays down the quality, standards, and details of materials, workmanship and finish. It also defines briefly procedure of sampling, testing, inspection acceptance/rejection, marking, preservation, packing and delivery etc.

2. The supplier/ manufacturer shall comply in every respect with the terms of this specifications and ensure that the stores conform to it, in all respects.

**0105. RELATED DOCUMENTS**

1. The latest standards and documents that have been referred and relevant to in this specification are:

S. No.	International Standards	Description of quality parameters
a.	AATCC 20 A	Method describe physical chemical and microscopic techniques for identifying textile fibers
b.	AATCC 8	Colour fastness to Crocking : Crockmeter
c.	AATCC -97	Method for Extractable Content of Textiles
d.	AATCC 133	Colour fastness to hot pressing
e.	ASTM D-3990	Standard terminology related to fabric defects.
f.	ASTM D 5430-07	Method for Visually inspecting and grading of fabric
g.	BS 1006	Colour fastness to light for textile and leathers

h.	ISO 13934-1	Determination of maximum force and elongation using strip method
i.	ISO 2859-1	Sampling Procedure for Inspection by attributes
j.	ISO 3801	Determination of mass per unit length
k.	ISO 7211/2	Determination of No. Threads per inch
l.	ISO 7211/5	Determination of linear density of yarn removed from fabric
m.	ISO 12945-2	Determination of fabric propensity to surface fuzzing and to pilling ,Martindale method
n.	ISO 12945-1	Determination of fabric propensity to surface fuzzing and to pilling ,Pilling Box method
p.	ISO 12947	Determination of abrasion resistance of fabric by the Martindale method
q.	ISO 105 J03	Method for calculating colour difference
r.	ISO 105 D01	Colour fastness to Dry Cleaning using perchloroethylene solvent
s.	ISO 105 E04	Colour fastness to perspiration
t.	ISO 105 B02	Colour fastness to artificial light : Xenon Arc fading lamp test
u.	ISO 105 C06	Colour fastness to domestic and commercial laundering

#### 0106 **DEFINITIONS & ABBREVIATIONS**

1. Definitions for the terms used in this standard are given at Annex A.

#### 0107 **TECHNICAL DETAILS OF FABRIC USED FOR BLACK JACKET**

1. The technical details of Fabric is enclosed at Annex B.

#### 0108 **FABRIC MANUFACTURING GUIDE LINE**

1. The technical details of Fabric used for Black Jacket is enclosed at Annex B
  - a. The material of Fabric is consists of Blend of polyester, cotton and wool.
  - b. Staple Yarns (long length fiber) shall be used in fabric manufacturing.
  - c. All fabric within one contract shall be dyed in the same manner.
  - d. The width of the finished cloth shall be  $(152.4 \pm 2.54 \text{ cm})$   $(60 \pm 1 \text{ inch})$  inclusive of selvage.
  - e. The cloth shall be scoured, heat set and dyed finished with Soil release finish.
  - f. The face of the cloth shall be slightly peached finished.
  - g. The starch & protein content including chloroform- soluble and water soluble material of the cloth shall not exceed 03% when tested i.a.w. AATCC -97.

- j. The finished cloth shall be furnished in continuous lengths of 40 meters (43.75 yards) and shall be put up on rolls.
- k. The consignment / offered quantity shall be 40 meter & above for 80% of consignment/ offered quantity, 20 meter & above for 15% of consignment/ offered quantity, 12 meter for 5% of consignment/ offered quantity.
- l. Maximum 04 pieces are allowed in single bolt/ roll of fabric.
- m. Total length of Single Bolt /roll is 120+0.5 meter ( ≈131.3 yards).
- n. Each roll shall be labelled or ticketed for fiber content.
- p. The face of the cloth shall be identified by stamping on that side with the word "Face" at each end of the roll.
- q. Each bolt shall be marked or tagged for the No x pieces of fabric along with length of each pieces inside a single bolt.

0109. **QUATITY REQUIRED FOR SAMPLING**

1. No of samples required for advance / preproduction/ TSR/ Bulk representative sample for testing are as follows:

Lot Size x Yards or meters	No. Sample drawn from various places x 02 meters
300 ≥800	02
801 ≥22000	06
22001 and over	09

0110. **TESTING**

1. The material shall be subjected to tests laid down in this specification at Annex B of this specification and related documents along with accessories for manufacturing of fabric used for Black Jacket will be required to complete all the tests mentioned at Annex B of this specification. The material may also be subjected to such tests which are deemed necessary by the Inspection Authority/ Subject Matter Expert in order to determine their suitability. However, any test considered important by Inspecting Authority other than Annex B. may also be conducted in order to check its suitability/ quality. Firm is liable to pay all the testing charges.

0111. **ADVANCE SAMPLE OR PRE-PRODUCTION SAMPLE OR TENDER SAMPLE**

1. Advance sample or pre-production sample, when required, shall be submitted in accordance with terms of the contract for inspection and testing as per Annex B and approved by CINS.
2. Whenever Tender, Advance or pre-production sample is not required, the suppliers/ manufacturer are advised in their own interest to submit to the Inspecting Officer or his representative an initial delivery of One % of the contract.



3. The approval of the sample, authorizes the commencement of bulk production but does not relieve the suppliers/ manufactures from compliance with all the provisions of this specification.
4. One approved sample after rectification of all observations highlighted by Inspecting Officer/ end user shall be properly sealed by INS and returned to the firm for guidance; rest of the approved sample shall be retained by INS for future use in bulk Inspection.(If deemed necessary).
5. The Pre-production sample shall be manufactured by the manufacturer with the same facilities which will be used for manufacturing of the bulk items.
6. Firm shall provide advance sample along with quality verification reports from an accredited laboratory, whenever asked/ required by Inspecting authority to ensure compliance of quality assurance parameters during production/ final internal inspection.

**0112. QUALITY OF WORKMANSHIP AND FINISH**

1. Workmanship and finish of the fabric used for Black Jacket shall be equal to the approved sample/ sealed pattern. It shall be the best of its class
2. The Fabric shall confirm the Technical details/ parameters defined at Annex B of this specification.
3. All properties and qualities which may not be defined in this specification i.e. feel/ finish etc. should be as per approved sample. Approved samples may be obtained from DCLS/PNCSD (if required) for future reference /inspection/ stock sample/ bulk production etc.

**0113. INSPECTION**

1. **Bulk Inspection.** Bulk inspection will be carried out after satisfactory completion of Visual Examination and Testing of B/R Sample.
2. **Inspection of Fabric.** 100% of the offered/ store shall be inspected as per procedure in vogue **OR** predefine Stage inspection **OR** as per Annexes C & D.
3. **Inspection/ Acceptance and Rejection of Stores.** Inspection/ acceptance is to be carried out to the entire satisfaction of Chief Inspector of Naval Stores and also as per instruction/ procedure laid down in Official unit order instruction:
  - a. Common defects in fabric is enclosed as Annex C for consultation/ guideline. However these guide lines may be considered by Inspecting officer in addition to Unit Instruction Order or as per order of Inspecting Authority.
  - b. The fabric of Black Jacket shall be examined for the correctness of material, shape, design, dimension, size, workmanship and finish.
  - c. CINS reserves the right to reject the whole supply in case, upon examination, material or packing of any sample or portion of the consignment is



found NOT CONFORMING the parameters laid down in this specification or the quality of product does not seems up to the mark.

d. If on examination of 5% of any delivery, 20% of those examined from bulk supply are found NOT CONFORMING to this specification in respect of the pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.

e. All stores and packing NOT fully in accordance with this specification shall be rejected.

4. **Responsibility for Compliance.** The inspection set forth in this specification shall become a part of the supplier's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to PN for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements. However, this does not authorize submission of known defective material, either indicated or actual, nor does it commit PN to acceptance of defective stores (material).

5. **Responsibility of contractor.** The contractor is responsible for the performance of all inspection requirements (inspection /examination and test) as specified here in. except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for performance of the inspection requirements

6. **Replacement by the Contractor.** The supplier/ manufacture is responsible for replacement of the consignment or any part there of whenever it is found to be not conforming to this specification or does not curtain its quality till the useful life of an item. The supplies so tendered in replacement, shall be subjected to testing/Inspection and acceptance by the Inspecting Officer.

7. **Responsibility for Safety.** The supplier/manufacture is wholly responsible for the safety of supplies during inspection, storage at firm's premises, proper packing, dispatch and delivery up to consignee.

8. The CINS is the authority in all matters pertaining to Inspection.

0114. **STAMPING OF ACCEPTED/ REJECTED STORES BY THE INSPECTOR**

1. Following instructions are to be followed:

a **Stamping of Accepted Stores.** Each acceptable uniform shall be stamped with Inspector's Individual Acceptance mark or as per Instructing of Inspecting Authority. The stamping shall be legible.

b **Stamping of Rejected Stores.** The rejected uniform shall be marked with Inspector's Rejection marked at the back/ visible place of uniform to avoid re-submission by the supplier.

0115. **SPECIAL INSTRUCTIONS**

1. **Care Instructions**. Care instructions in English and Urdu shall be attached with each fabric roll and must fulfill minimum requirement as follows:

- a. Ironing Procedure.
- b. Washing/ Dry cleaning procedures.
- c. Any Prohibition i.e. Do not use bleach / chlorinated water.

0116. **IDENTIFICATION LABEL**

1. Each fabric roll of Black Jacket shall bear following minimum information written on polyethylene packing:

- a. Item name/ item description with NSN/Pattern No.
- b. Material Composition, GSM, Linear density etc.
- c. Contract number and Date.
- d. Year of manufacture.
- e. Contractor's name, initials, or trade mark.
- f. Batch N.o / Bar code.
- g. Identification of face at suitable places.

0117. **PACKING DETAILS**

1. The store when ordered to be delivered 'PACKED' shall be packed as per following instructions:

- a. Each 40 meters (43.75 yards) meter fabric of Black Jacket shall be properly rolled.
- b. The roll shall be wrapped/ packed in a neat, dry and clean condition in polyethylene bag of thickness of 0.06mm ( $\pm 0.01$ mm) and suitable size.
- c. The consignment / offered quantity shall be 40 meter & above for 80% of consignment/ offered quantity, 20 meter & above for 15% of consignment/ offered quantity, 12 meter for 5% of consignment/ offered quantity.
- d. Maximum 04 pieces are allowed in single bolt/ roll of fabric.
- e. Total length of Single Bolt /roll is 120+0.5 meter ( $\approx 131.3$  yards).
- f. Each roll shall be labelled or ticketed for fiber content.

0118. **PACKING LIST**

1. Firm is bound to provide a packing list of store offered for inspection along with the challan and each packed box giving full, which include complete details about the store i.e. Pattern No., Description of Store, size, quantity, Contract No, & date, challan No &

date, I/Note No. or Voucher No. with date, Consignee, Firm's Name, Date of packing, Packer's Signature and Stowage/ Stacking Instruction.

#### 0119. **MARKING OF STORES**

1. In addition to any special marking required by contract or order, the marking of packages shall be stenciled with quick drying Black ink/ Paint with clearly defined characters as described below:

a. On Front and Top:

- (1) Consignee Address.
- (2) Contract No and date.
- (3) Description of Stores Packed and NSN/Patt no.
- (4) Stowage / Stacking Instruction.
- (5) Quantity of the Item/. No. of rolls
- (6) Weight of the Carton

b. On Back:

- (1) Manufacturers name / Firm's name.
- (2) Voucher No. or Inspection Note No. and date.
- (3) The No. of individual Package and the total No of Packages in the consignment joined by the word 'of 'e.g. 2 of 300.
- (4) Weight of the package.
- (5) Month and year of packing.
- (6) Destination i.e. Railway station/ (Navy).

#### 0120. **DELIVERY**

1. The consignment of store will be delivered in accordance with the terms of contract.
2. The store shall be delivered in Brand new, clean and dry condition.
3. The contractor / manufacturer is fully responsible for the safety of the supplies during inspection, storage at firms and consignee premises proper packing, dispatch and delivery up to consignee.

xxxxxxxxSDxxxxxxxx

**AZHAR HUSSAIN SHAH TI (M)**

Captain Pakistan Navy  
Director Inventory Deletion

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**ANNEX A TO**  
**PN SPECIFICATION NO 06/2024**  
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**DEFINITIONS & ABBREVIATIONS**

1. **Definitions**

- a. **Inspector:** The term inspector shall include the "Inspection Authority", inspecting officer and their representatives, duly authorized for the purpose of discharging inspection duties involved.
- b. **Inspection Authority:** Chief Inspector of Naval Stores (CINS). His verdict in respect of Sealed Inspection matters is to be taken as final.
- c. **Inspecting Officer:** An officer nominated by the CINS for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.

2. **Abbreviations**

- a. **CINS:** Chief Inspector of Naval Stores.
- b. **PNCTA:** Pakistan Navy Central Testing Authority.
- c. **PNCSD:** Pakistan Navy Clothing Store Depot.
- d. **DCLS:** Directorate of Clothing Stores.
- e. **AATCC:** American Association of Textile Chemists and Colorist
- f. **ASTM:** American Society for Testing and Materials
- g. **BS:** British Standards
- h. **ISO:** International Organization for Standardization

**ANNEX B TO**  
**PNSPECIFICATION NO 06/2024**  
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**TECHNICAL DETAIL OF FABRIC USED FOR BLACK JACKET**

S. NO	ITEM	STANDARDS	REQUIREMENT	
1.	Base fabric			
a.	Material	AATCC 20 A	10 ± 5 %Wool 20± 5% Cotton 70± 5% Polyester	
b.	Weave construction	ISO 7211/1	Twill 2x2	
c.	Dye	Chemical analysis	Reactive / Disperse or Pre Metallised/ Disperse dyes	
d.	Shade: Pantone TCX (19-4006)	ISO 105 J03/ visual analysis	L= 16.50 a=0.3 b=-0.77	
e.	Change in shade		ΔE= 01	
f.	Weight / meter <sup>2</sup> (GSM)	ISO 3801	280 gsm ± 2%	
g.	Threads per inch(2.54cm) (1) Warp (2) Weft	ISO 7211/2	80± 2 50± 2	
h.	Linear density (1) Warp (2) Weft	ISO 7211/2	2/30 ± 2 2/18 ± 2	
2.	Performance criteria			
a.	Pilling and fuzzing (5000 cycles)	ISO 12945-2	Grade 4 or better	
b.	Abrasion (5000 cycles)	ISO 12947	No thread break/ pills	
c.	Color fastness to light	ISO 105 B02/ BS 1006	Grade4 or better	
d.	Color fastness to dry cleaning (1) Change in shade (2) Change in solution	ISO 105 D01	Grade 4 or better Grade 4 or better	
e.	Color fastness to perspiration (1) Change in shade (2) Staining (a) Wool	ISO 105 E04	Acid Grade 4 or better  Grade 4	Alkaline Grade 4/5 or better  Grade 4

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	(b) Acrylic (c) Polyester (d) Nylon (e) Cotton (f) Acetate		Grade 4/5 Grade 4 Grade 4 Grade 4 Grade 4	Grade 4/5 Grade 4/5 Grade 4 Grade 4/5 Grade 4/5
f.	Color fastness to Domestic Washing (1) Change in shade (2) Staining (a) Wool (b) Acrylic (c) Polyester (d) Nylon (e) Cotton (f) Acetate	ISO 105 C06	Grade 4 or better  Grade 4 Grade 4/5 Grade 4 Grade 4 Grade 4 Grade 4	
g.	Colour fastness to rubbing  (1) Dry (2) Wet	AATCC 8 Force: 9 N Soak: 65% Preconditioning: 4 hrs Conditioning: 4 hrs	Grade 4 or better	
h.	Breaking Strength( B.G: 5cm x 20 cm) (1) Warp (2) Weft	ISO 13934	1420±10 N 1280 ±10 N	



**ANNEX C TO**  
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**COMMON DEFECTS IN FABRIC (ASTM D-3990)**

S.No	Defects	Definition
<b><u>FABRIC</u></b>		
a.	<b>Abrasion Mark (bruise, Mark or rub) Chafe</b>	An area of fabric damaged by friction Damaged due to a braded or uneven surface in a machine.
b.	<b>Baggy or wavy cloth</b>	Cloth that will not lie flat on a Cutting Table Tight or loose yarn either in warp or filling (weft).
c.	<b>Barré Mark</b>	An unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric. Barré can be caused by physical, optical, or dye differences in the yarns, geometric differences in the fabric structure, or by any combination of these differences.
d.	<b>Blotch</b>	An off colored area of any shape caused by grease or Oil. (Syn. oil spot). Cause due to leakage/ slippage from machine.
e.	<b>Bow</b>	A fabric condition resulting when filling yarns are displaced from a line perpendicular to the selvages and form one or more arcs across the width of fabric.
f.	<b>Broken filament</b>	In multifilament yarn, breaks in one or more filaments.
g.	<b>Clip mark</b>	An open place causing a streak of variable length approximately parallel of the length of width.
h.	<b>Decanting Mark</b>	A crease marks or impression extending across the cloth near the beginning or end of a piece due to the thickness of the fabric leader seam.
j.	<b>Double Pick</b>	In woven fabrics, two picks wrongly place in the same place.
k.	<b>Draw Back</b>	A weave distortion characterized by tight and stack places in the same warp yarn.
l.	<b>End out</b>	A void caused by a missing warp yarn.
m.	<b>Float</b>	In woven fabrics, the portion of a warp or filling yarn that extends unbound over two or more warp of filling yarns.
n.	<b>Filling Band</b>	In woven fabrics, visual defect across the width due to a change occurring in the yarn for a large number of picks.
p.	<b>Frosting</b>	A change in color in a limited area of fabric cause by abrasive wear.
q.	<b>Hole</b>	In fabric, imperfection, wear one or more yarn or sufficiently damaged to create an aperture.
r.	<b>Fuzzy</b>	Characterized by a hair appearance due to protruding broken fibers or filaments.
s.	<b>Let-off Mark</b>	In woven fabrics, a corrugated defect pattern distributed across the fabric width.
t.	<b>Loom fly</b>	Waste fibers create during weaving that are woven into a fabric.

u.	<b>Loop Salvage</b>	An improperly woven salvage of uneven width or a salvage containing irregular filling loops extending beyond the outside edges.
v.	<b>Messiness</b>	Surface distortion in a fabric characterized by objectionable unevenness due to many minor deformations.
w.	<b>Pin Hole</b>	In fabric, a very small hole, approximately the size of the a cross section of the pin.
x.	<b>Pin Mark</b>	A series of holes near the edge parallel with the lengthwise direction of a fabric caused by the holding device on the pin tender frame.
y.	<b>Reed Mark</b>	In woven fabric, a creak between groups of ends, either continues or at intervals.
z.	<b>Scalloped Salvage</b>	An abrupt, narrow indentation in the salvage.
aa.	<b>Salvage Mark</b>	In finished cloth, a lengthwise crease mark along the salvage caused by an edge being folded or doubled.
ab.	<b>Shiner</b>	A streak, usually short, caused of a lustrous section of filament yarn.
ac.	<b>Smash</b>	In woven fabrics, relatively large hole characterized by broken warn ends and floating picks.
ad.	<b>Skew</b>	A fabric condition resulting when filling yarns are angularly displace from a line perpendicular to the edge or side of the fabric.
ae.	<b>Snag</b>	In fabrics, a yarn or part of a yarn pulled or plucked from the surface.
af.	<b>Thin Place</b>	In fabric, appearance characterized by a small area of loosely placed yarn or by a congregation of thin yarn as compared to the adjacent construction.
ag.	<b>Tight Salvage</b>	In woven fabrics, salvage yarn shorter than warp yarn in the body of the fabric.
ah.	<b>Streak</b>	An extended unintentionally strips narrow width, often a single yarn.
aj.	<b>Tram Mage</b>	In woven crepes, a puckered area in which a filling yarn has twist running in the same direction for several picks instead of alternating S and Z twist.
ak.	<b>Temple Mark</b>	In woven fabrics, small holes or distortions adjacent to the salvage.
al.	<b>Tender Mark</b>	A visible deformation on the side edge or body of a fabric due to pressure for clips or pins.

**ANNEX D TO**  
**PN SPECIFICATION NO 06/2024**  
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**GUIDE LINE FOR FABRIC INSPECTION**

1. **Fabric Inspection.** Fabric inspection is usually done on fabric inspection machines. These machines are designed so that rolls of fabric can be mounted behind the inspection table under adequate light and rerolled as they leave the table. Defects in a fabric can be seen readily with these machines, as the inspector has a very good view of the fabric and the fabric does not need to be reversed to detect defects. There are various fabric inspection systems:

- a. 4-Point system (Usually recommended by International firm).
- b. 10-Point system

2. **4-Point System** The 4-point system, also called the American Apparel Manufacturers Association (AAMA) point-grading system for determining fabric quality, is widely used by producers/ manufacturers of apparel fabrics and by the Department of Defense in the United States and is endorsed by the AAMA.

a. Criteria of giving penalty points based on defects and defect length. Penalty points are assessed to a piece of fabric according to the length of defects measured in inches.

b. Each roll in the sample shall be examined on face side only. When the total yardage in the roll does not exceed  $120 \pm 0.5$  meters ( $\approx 130 \pm 0.5$  yards). Entire meters/ yardage in the roll shall be examined. When the total meters/ yardage exceeds  $120 \text{ meters} \pm 0.5 \text{ M}$  ( $130 \pm 0.5$  yards) only determined meters shall be examined. All the defects are define in ASTM D-3990, which are clearly noticeable at normal inspection distance 0.91 M (03 feet) shall be scored against demerits points. Clearly visible knots shall be marked as demerit points. No linear yard (increments of 01 yards (0.91m) on the measuring device of inspection machines) from any one roll with in the sample shall be penalized more than 04 points. The sample size shall be 20 rolls selected from offered quantity. The lot shall be categorized, if the points per 100 square yards ( $83.6 \text{ m}^2$ ), if the total yardage examined exceeds 25 points. The lot shall be categorized if the points per 100 square yards ( $83.6 \text{ m}^2$ ) of two or more individual's rolls exceeds 38 points. If one roll exceeds the point level per 100 square yards ( $83.6 \text{ m}^2$ ) a second sample of 20 rolls shall be examined only for individual roll quality examination. The lot shall be categorized if one or more rolls in the second sample exceeds 38 points per 100 square yards ( $83.6 \text{ m}^2$ ). Point computation for lot quality and individual roll quality shall be as follows:

<b><u>Point Values For Fabric Defects (4-Point System) Criteria Of Giving Penalty</u></b>	
<b>Length of fabric to be Inspected</b>	<b>Points Allotted</b>
(1) Length of defect in fabric, either length or width	

(a)	Upto 03 inches( 7.6 cm) or less in any direction	1
(b)	Over 03 inches (7.6cm ) up to 06inches (15.2cm)	2
(c)	Over 06 inches (15.2cm) up to 09 inches (22.9cm)	3
(d)	Over 9 inches (22.9 cm)	4
(2)	Holes and openings (largest dimension)	
(a)	01 inch (2.54cm) or less	2
(b)	Over 1 in	4
(3)	Baggy, ridgy, wavy cloth	4
(4)	Width less than specified	4
(5)	Characteristic of finish hand and shade not equal to standard sample	4
(6)	Non uniformity of shade (molted. Streaky or cloudy)	4
(7)	Holes, cuts, tears, open places	4

c. **Calculation:** Total defect points per 100 yd<sup>2</sup> (83.6m<sup>2</sup>) are calculated, and normally those fabric rolls containing more than 40points/100yd<sup>2</sup> (83.6m<sup>2</sup>) are considered "second." **e.g.** A fabric roll 120 yard long and 48 inch wide contains, the following defects:

2 defects up to 3 inch.	2 x 1= 2 points
5 defects over 3 inch. but less than 6 in	5 x 2= 10 points
1 defect over 6 inch. but less than 9in.	1 x 3= 3 points
1 defect over 9 inch.	1 x 4= 4 points
Total defect points	19

Therefore,  
Points/100yd<sup>2</sup> (83.6m<sup>2</sup>) =

$$\frac{\text{Total points scored in the roll} \times 3600}{\text{Contracted width of Fabric (inches or meters)} \times \text{Total yards inspected}}$$

$$= 19 \times 3600 / 48 \times 120$$

$$= 11.9 \text{ defect points/ } 100 \text{ yd}^2$$

So if the acceptance criteria are 40 points/100yd<sup>2</sup>, then this roll is acceptable.

### 3. **Examination of Length.**

a. **Individual rolls.** During the examination, each roll in the sample shall be examined for length. Any length found to be less than the minimum specified or more than 2 yards (1.82m) less than the length marked on ticket shall be considered a defect with respect to length. The lot shall be categorized if two or more rolls in the sample are defective with respect to length.

b. **Total Yardage in sample.** The lot shall be categorized, if the total of the actual lengths of rolls in the sample is less than the total of the lengths marked on the tickets. The rolls examined shall be those selected for the examination of individual rolls.

- c. Examination for Shade Variation. During the examination, each roll in the sample shall be examined for shade variation. Any roll in the sample exhibiting uneven shade, shade variation side to side, side to center, or end to end, shall be cause for rejection of the entire lot represented by the sample.
- d. Examination for Shade match and finish, individual rolls. Each roll in the lot shall be examined visually for shade match and finish. A roll shall be unacceptable if it fails to meet the requirements for shade match or finish. The sample unit shall be a 4 inch by 20 inch (10.2 by 50.8cm) swatch of the cloth. A sample unit shall be drawn from each roll in the lot.
- e. Examination for face identification and non-conformance with the Textile fiber products Identification Act. During the examination, each roll in the sample shall be examined for these defects. The lot shall be categorized if two or more rolls in the sample have face identification missing from either or both ends, or are not labeled or ticketed.

**ANNEX E TO**  
**PN SPECIFICATION No 06/2024**  
**PROMULGATION DATE 21 Mar 2025**

**FEEDBACK FORM**

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

Item Description#: \_\_\_\_\_

Issue/Problem occurred: \_\_\_\_\_

PN SPEC #: \_\_\_\_\_

Possibility to resolve Issue: \_\_\_\_\_

Any Other Remarks: \_\_\_\_\_

Note:

- It's good to give feedback for improvement in any clothing Item.
- Recurring problem will also be intimated through this form.

**COUNTERSIGNED**  
**By CO/Admin Authority**

Name Stamp



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PN SPECIFICATIONS NO 06/2024  
Cdr PN M Kamran Rafique (CO PNCSD) 09 Apr 25, 0934 hrs