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INSPECTORATE OF GENERAL STORES & CLOTHING
DHAKA CANTONMENT

SPECIFICATION NO: IGS&C/CLO/1073 DT: 07 OCT 2018

DRAWING NO: NIL

VOCAB SECTION: CA

CAT/PART NO: NIV

NOMENCLATURE: CLOTH TC RIB STOP COMBAT PRINTED (BLACK, BROWN, LIGHT GREEN & KHAKI)

(In suppression of previous technical data no IGS&C/Clo/934 dt.13 Oct 2016)

1. Basic Materials

Name of Component	Materials
Basic Materials	50% Polyester & 50% Cotton

2. Parameters of Material

Name of Component	Chemical/Physical Properties	Visual Properties
Width of Cloth	-	143 - 148 cm
Selvage	-	0.60 cm
Distance between two Ribs	-	0.65 cm
Type of Weave	1/1	
Wt/Sq Mtr	195 ± 5 gm	
Count of Yarn in Warp & Weft	2/45 ^s ± 2	
No of Threads/2.54 cm (Method: ISO 7211/2)		
a. Warp	120 ± 2 nos single (Each 2 ply)	
b. Weft	65 ± 2 nos single (Each 2 ply)	
Tensile Strength in kg (Method: ISO 13934-1)		
a. Warp	120 ± 5 kg	
b. Weft	55 ± 5 kg	
Shrinkage - By Machine (Method: BDS ISO 7771)		
a. Warp	2% (Max)	
b. Weft	2% (Max)	

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Name of Component	Chemical/Physical Properties	Visual Properties
Classification of Dyestuff	Re-active & Disperse Dyestuff	
Shade		04 (Four) Colour/Shade such as bellow: Black (Pantone Colour Code 19-4205 TCX) Brown (Pantone Colour Code 19-1121 TCX) Light Green (Pantone Colour Code 18-0523 TCX) Khaki (Pantone Colour Code 16-1010 TCX) (As per the approved sample held in IGS&C).

Note:

- All these 04 (Four) colours are to be printed according to the required percentage of reactive & disperse dyestuff together.
- Design of print must be very clear. Any overlapping, misprinting, bleeding, staining and defect of printing will not be accepted.
- Finishing of cloth must be smooth and soft.

Special Conditions for Grey Cloth

- Cloth must be free from all kinds of unevenness, naps, slabs, knots, weaving defects, viscose, rayon, thread missing and foreign materials etc.
- For weaving grey fabric yarns must be manufactured by combing process & must be twisted.
- Selvage must be firm & free from all defects. Loose selvage is not acceptable.

3. Test Parameters

Name of Test	Test Method	Rating
Washing Test no – 2	ISO 105 CO2	Grey scale rating better than 4
Washing Test no – 4	ISO 105 CO4	Grey scale rating better than 4

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Name of Test	Test Method	Rating
Rubbing Test (Rubbing with ordinary soap in cold & hot water at 60° c)	-	Grey scale rating better than 4
Sunlight Test (72 Hrs)	ISO 105 B02	Grey scale rating better than 4
10 Times Wash (Soap washing/Detergent powder)	-	Grey scale rating better than 4
Resistance to Pilling	ISO 12945-2	Rating grade better than 3
Resistance to Abrasion	ISO 12947-1	Rating grade better than 3

Special Condition – Combat Printed Cloth

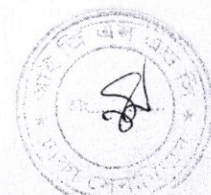
- a. High quality dyestuff from any internationally reputed company (preferably from Germany and Switzerland) has to be used.
- b. Shade must be as per approved sample held in IGS&C.
- c. Colour fastness bellow grey scale rating 3/4 may be rejected.
- d. Colour/Shade must not be discolored/faded within first 06 (six) months of use. Supplier/ Manufacturer must provide warranty certificate in this regard.
- e. Product should be free from defective/mixed fiber such as Viscose, Rayon etc.

4. **Length of Thaan**

- a. Minimum 50.0 metre each Thaan before inspection.
- b. During 100% inspection, up to 9.90 metre than to be considered as multiple of 3.30 metre. Above 9.90 metre than defective portion has to be marked as rejected without cutting. Final quantity of the than to be counted and marked by deducting the rejected quantity.

5. **Marking (Thaan)**

- a. In case of central procurement name of the supplier, contract no & date, challan no with dt have to be printed clearly on the selvage and it should be printed twice in every one meter (Example: XXXX Ent, Cont. No-XXXXXXXXXXXX Dt. XX Feb 18, Challan-1/18 Dt. Mar 18).
- b. In case of local purchase name of the supplier, contract no & date, challan no with dt, LP by COD have to be printed clearly on the selvage and it should be printed twice in every one meter (Example: XXXX Ent, Cont. No-XXXXXXXXXXXX Dt. XX Feb 18, Challan-1/18 Dt. Mar 18, LP by COD).
- c. Both ends of a than to be marked of with 100% inspection's acceptance marks, length of than and the word "SENABAHINI" with indelible ink.
- d. Any coloured stripe near the selvage of cloth will not be allowed.



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6. **Packing.** Quantity of each Roll is to be 125 to 150 metre and each roll should be packed in the following process :
- Each Thaan should be rolled on a good quality paper tube and packed in polythene. Then wrapped with good quality Hessian cloth.
 - One edge of Hessian cloth to be stitched and other edge of Hessian cloth to be tied with twine jute.
7. **Marking (Roll)** One side of the roll to be stenciled with nomenclature of store, contract no with dt, l/note no, date and total quantity of cloth and other side to be stenciled with the name of Consignee, Roll No & Firm/Textile factory's Name.

8. **Samples**

Sample Type	Quantity/Remarks
Tender Sample	10 Meter printed cloth to be submitted as tender sample
Advance Sample	10 Meter printed cloth to be submitted as advance sample with packing material.
Advice Sample	10 Meter printed cloth to be submitted as advice sample
BR Sample	01 (One) Metre sample per 1000 metre of each challan to be collected as BR sample for lab and visual test/inspection.

9. **Warranty/Guarantee** The warranty/guarantee period of the store will be 06 (Six) months from the issue of Inspection Note' by IGS&C. In this regards the manufacturer/supplier should provide a warranty/guarantee certificate regarding durability of the supplied stores. If supplied stores found defective within 06 (Six) months during storage or in practical use (Under normal use with standard maintenance) then defective cloth to be replaced by the manufacturer/supplier at their own cost within 30 (Thirty) days as the case arises.

10. **Test Report and Quality Control Certificate by Supplier.** Supplier has to provide fabric/product test report (for tests mentioned at ser 1 - 3) from any reputed testing organization (e.g. Intertek, SGS, Bureau veritas etc) alongwith advance sample and subsequent each challan. Supplier should also certify that they have carried out a comprehensive quality inspection at their end and they are fully confirmed and satisfied according to the points as mentioned below along with each challan:

- Products are produced/manufactured as per specification.
- Products are tested/inspected as per the specified tests mentioned in this specification and found correct in all respect.

11. **Special Condition.** There should be an agreement between supplier and manufacturer where supplier will manufacture product from a specific factory (Maximum three factories can be nominated by the supplier to avoid unforeseen situation for which the primarily selected manufacturer or factory owner by the supplier may not be able to run the factory/machineries; i.e natural disaster, unavoidable mechanical failure of machines etc) and submit with Tender. Later the supplier will produce 100% product from the same factory. The supplier must submit one copy of this agreement initially at DGDP. The supplier will submit the final agreement on stamp between supplier and manufacturer to DGDP while contract is being processed with DGDP.



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Eligibility of Supplier to Participate in Tender

a. Local Agent/Source: Manufacturer/Supplier having the capability and recent experience to manufacture/supply both the Grey and Combat Printed Cloth in Bangladesh Army are allowed to participate in the tender.

b. Local Agent or Supplier of Foreign Agent/Source.

(1) Following certificates from foreign original manufacturer/ factories to be submitted during tender:

- (a) Agreement between local supplier and the foreign original manufacturer/factory.
- (b) Can produce the product as per specification.
- (c) Can produce the required quantity within the schedule time limit.
- (d) Warranty/Guarantee Certificate about the quality and colour of the cloth.
- (e) Foreign Manufacturer's experience certificate.

13. Inspection

- a. 100% inspection will be carried out for all local/foreign contract.
- b. Pre-Shipment Inspection (PSI) will be carried out for foreign contract.

Recommended by

S M SHAMSUL SALEKIN
Colonel
Chief Inspector

৪/১৭/১০
Approved
ITD D/te

Approved by

Director, ITD Directorate



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Test Parameters of Cloth TC Rib Stop Combat Printed Including with Specification

Name of Test	Test Method	Rating
Colour Fastness to Hot Pressing (Temperature: 150°C, Time: 15 Sec) (Grey Scale Rating) - Dry condition - Damp condition - Wet condition	ISO 105-X11	Grey scale rating better than 4



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