Perlified GOVERNMENT OF INDIA ( MINISTRY OF DEFENCE ) Horisonely Sealed Provisional Specification No. IND/TC/2123 (a) (b) SPECIFICATION FOR CAT NO NIV LAMINATED CLOTH HESSIAN THIS SPECIFICATION CONSISTS OF ... SIX. PAGES 2. THIS SPECIFICATION IS INTENDED TO GUIDE PURCHASE, INSPECTION AND MANUFACTURE OF LAMINATED CLOTH HESSIAN AGAINST DEFENCE REQUIREMENTS. IN CASE OF DISCREPANCY BETWEEN THIS SPECIFICATION AND ANY SAMPLE OR PATTERN THIS SPECIFICATION TOGETHER WITH DRAWING IF ANY WILL BE TAKEN AS CORRECT. WHEREVER A REFERENCE TO ANY OTHER SPECIFICATION DRAWING OCCURS IN THIS SPECIFICATION, IT SHALL BE TAKEN AS A REFERENCE TO THE LATEST VERSION OF THAT SPECIFICATION/DRAWING EXISTING AT THE TIME OF FINALISATION OF THE CONTRACT ..... gealer woole to ISSUED BY THE CONTROLLER COMPROLLERATE OF TEXTILES & CLOTHING POST BOX NO 294 KANPUR PRICE: Rs. 22R Received vide COAT&C letterno. S/CO31/A/TC-5 (GAUTAM GUPTA) JOY CONTROLLER LUSTATE OF INSPECTION GYTHES & CLUTHING, KAMPUP

specification for any tender or contract shall mean the edition current on the date of such tender or contract.

Indian Standard specifications are issued by the Indian Standard, Institution and are obtainable from the sales section Indian Standard Institution, Manak Bhawan, 9 Bahadur Shah Zafar Marg New Delhi or their regional offices. Specification in CIGS series are issued on payment from the Controller, CIGS Post Box No. 127 Kanpur.

#### 3. STANDARD PATTERN

The Standard pattern held by the Controllerate of Inspection Textiles and Clothing Kanpur shall constitute the standard as regards any particulars or properties not noted/defined in this specification.

# MATERIALS

The laminated Cloth Hessian shall be manufactured from Jute fibre of good quality free from roots, cropends, cuttings, dust, dirt, dry pulp or any other unwanted matter and low density Polythene Film. Only virgin Polythene shall be used. No reclaimed Polythene shall be used.

#### MANUFACTURE 5.

5.1 The yarns used shall be evenly spun and uniformly twisted. There shall be no reed marks or gaps. The cloth shall be compattly woven with firm and straight selvedges, free from broken ends, weaving flaws, slubs, other defects. No weighting or filling materials shall be used.

- 5.2 The fabric shall be laminated on one side by Low Density Polythene film by a suitable process in such a way that it does not get tendered or dama, d during the process of lamination.
- 5.3 The lamination shall be non-porous, homogeneus and non-blooming and firmly adhere to the basic fabric. It shall no tendency to separate from the base fabric when the finished material is stretched, folded or processed. The finished fabric shall be soft, pliable and shall have a smooth finish. It shall be free from pinholes, stains, streaks, wrinkles and other surface impurfections. The coating shall have no disagreeable odour.

### 6. DIMENSIONS

Lhave-

6.1 The finished Laminated Cloth Hessian shall conform to the dimensions as specified. in Appendix 'A' of this specification.

# 7. WORKMANSHIP AND FINISH

7.1 In appearance, shade, workmanship and finish and in all other respects not defined in this specification, the store shall conform to the sealed pattern held in in the custody of the Inspection Authority.

## 8. MARKING

8.1 Each roll shall be legibly and indelibly marked in 5 cm characters at both ends with Cat No, correct nomenclature, manufacturers name or recognised trade mark length and width of roll and year of manufacture. The marking shall be done with Ink Cloth marking.

# 9. PRE-INSPECTION

9.1 Manufacturers/Contractors must satisfy themselves that the stores are in accordance with the terms of the Contract and fully conform to the required specification by carrying out a thorough pre-inspection of each lot before actually tendering the same for inspection to Inspecting Officer mentioned under the terms of the contract. A declaration by the Contractor that necessary pre-inspection has been carried out on the store tendered will be submitted alongwith the challan. The declaration will also indicate the method followed in carrying out pre-inspection showing features checked/tested and will have the test certificate, attached to the Challan/declaration.

9.2 If the Inspecting Officer finds that the pre.inspection of the consignment as required above has not been carried out, the consignment is liable for rejection.

### TO. INSPECTION

- 10.1 If, on examination, material from any portion of the consignment is found not to be fully in accordance with the specification the whole consignment is liable to be rejected.
- 10.2 If on examination of 20 percent of any delivery 20 percent of those examined are found/to be in / not conformity to this specification, the whole consignment may be rejected.
- 10.3 All Laminated Cloth Hessian found not fully in accordance with this specification shall be rejected.

### 11. SAMPLING

- 11.1 The supplier shall offer the store serially numbered and arranged in such a way that the entire lot is accessible to the Inspector.
- 11.2 Based on the lot size offered for inspection Sample Units for visual inspection be drawn as per column 2 of the table using technique of random sampling as per IS: 4905.
- 11.3 On being satisfied with preliminary visual examination sample shall be drawn as per column 3 of the table from the sample units drawn for visual examination as per column 2 of the table.

# TABLE FOR SCALE OF SAMPLING

Tot digo	Sample size for visual examination	Dalilhte pree ror
Upto_25 26 to 100 101 to 300 301 to 500 501 to 1000	15 30 40	1 3 5 7 13

# 12. PACKAGING

12.1 The laminated Cloth Hessian shall be supplied in the form of rolls/bolts measuring 90 m or as ordered. The store shall be delivered in new, dry and clean condition.

If ordered for delivery to a local inspection Depot the store shall be delivered loose in firms returnable packs. After inspection the accepted Supplies shall be packed by the Inspection Depot Authorities as described in sub paras below:-

In case of rolls the cloth shall be wound on wooden mandral of suitable diameter. Each roll/bolt shall be made into the unit pack by tying suitably with jute twine 3 ply at minimum three places. Suitable number of unit packs (rolls/bolts) shall be arranged and firmly tied with jute Twine 3 ply(double fold) in such a manner to form a compact bale of rectangular shape as for as possible. These shall then be finally wrapped with an inner and outer layer of laminated cloth Hessian facing the laminated surface inside. Sufficient Cloth shall be wrapped to ensure full protection of the contents. The balds containing rolls shall not be pressed. The bale shall be proper-ly and securely stitched with double jute twine 3 ply with not less than 6 stitches/dm taking care not pierce inner wrapping during stitching. Sufficient cloth shall be pulled out at each corner to form 'ears' of about 15 cm in length. Slats of wood of 7 cm wide and 1 cm thick free from fot or other harmful fungal/insects attack or bamboo strips (both duly preserved) shall be placed at each edge of bale length wise and finally bound with at least 3 bands not more than 25 cm apart. Hot rolled steel strip(baling)/Mild St el for general Engg purposes (Variety No. V of IS: 280). The free ends of strappings shall be sealed with machine or rivetted firmly.

For Ordnance Fy. packing the store shall be packed as per details given in above paras to form & bale of gross mass of (255 kg and for DOS it shall be 40 kg. approximately.

Before despatch such bale shall be legibly and indelibly (by ink Cloth marking) marked by stencil showing the following details: -

Nomenclature and Cat. Part No. of the Store.

Quantity packed in each bale. Lot and scrial No. of bale. ii)

iii)

Month and year of packing. iv)

Name and trade mark of manufacturer. v)

Gross mass of the bale in kg. vi)

Nam and address of the Consignee. viiì

viii) I/Note No. & dt.

A/T/SO No. & date.

KANPUR

CONTROLLERATE OF INSPECTION PEXTILES AND CLOTHING

Method of	Tol.	,	Q.
IS: 1954	+ 0.5 cm	102or as ordered	Width in om Threads/dm
IS: 1963	i+ 2	747	Thre
963	1+	77	ads/dm Weft
	0.1	0,70	(Thickness under press of 210 g, in mm (Min
IS: 1964	+ 10%	400	Mass/Sq m i under pressure Finished of 210 'g'/Sq m cloth in mm (Min)
	- 1	110 1098	n gi
1969		1098	Breaking new 10x20 cm grips in Warp Warp
	1	1180	ing load cm bet in N Weft
	-	4	Force required ( Weave to seperate bothbasic layers (warp & cloth west directions)
-		plain	Weave of Cloth
IS: 2508	1	Basic cloth 0.90- Jutecoating 9.92 Low Density Polythene	Force required (Weave of (Materials (Density to seperate bothbasic (ayers (warp & Cloth weft directions) (film in 'N') (g/ml

GOVERNMENT OF INDIA
( MINISTRY OF DEFENCE )

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Provisional Specification No. IND/TC/2123 (a) 47 (b)

SPECIFICATION FOR CAT NO NIV

### LAMINATED CLOTH HESSIAN

- 1. THIS SPECIFICATION CONSISTS OF ..... PAGES
- 2. THIS SPECIFICATION IS INTENDED TO GUIDE PURCHASE, INSPECTION AND MANUFACTURE OF LAMINATED CLOTH HESSIAN AGAINST DEFENCE REQUIREMENTS.
- IN CASE OF DISCREPANCY BETWEEN THIS SPECIFICATION AND ANY SAMPLE OR PATTERN This SPECIFICATION TOGETHER WITH DRAWING IF ANY WILL BE TAKEN AS CORRECT.
- WHEREVER A REFERENCE TO ANY OTHER SPECIFICATION/
  DRAWING OCCURS IN THIS SPECIFICATION, IT SHALL
  BE TAKEN AS A REFERENCE TO THE LATEST VERSION OF
  THAT SPECIFICATION/DRAWING EXISTING AT THE TIME OF
  FINALISATION OF THE CONTRACT.....

viole CONTRC letterno S/6031/A/ TC-5 0130-6-89 July 1

ISSUED BY

THE CONTROLLER
CONTROLLERATE OF TEXTILES & CLOTHING,
POST BOX NO 294
KANPUR

PRICE: Rs. 22R-

1986

Received vide CITAC letter to 5/2874/TC-15 DI- 29-4-0.0.

### 1. SCOPE

1.1 This specification covers the requirements of Laminated Cloth Hessian which is intended for the packing of stores meant for transportation/storage against Defence requirements.

## 2. RELATED SPECIFICATIONS

2.1 Reference is made in this specification to -

i) IS: 2818 Pt (II)

ii) IS: 394

iii) CIGS/US/282 (Prov)

iv) IS: 1912

v) IS: 2508

vi) IS: 4905

Indian Hessian (Type-I)

Ink Cloth Marking

Polypropylene Strapping

Jute Twine 3 Ply

Low Density Polythene Film

Method of Random Sampling

- 2.2 All specifications/drawings referred to in this specification for any tender or contract shall mean the edition current on the date of such tender or contract.
- 2.3 Indian Standard specifications are issued by the Indian Standard Institution and are obtainable from the sales section Indian Standard Institution, Manak Bhawan, 9 Bahadur Shah Zafar Marg New Delhi or their regional offices. Specification in CIGS series are issued on payment from the Controller, CIGS Post Box No. 127 Kanpur.

# 3. STANDARD PATTERN

3.1 The Standard pattern held by the Controllerate of Inspection Textiles and Clothing Kanpur shall constitute the standard as regards any particulars or properties not noted/defined in this specification.

# 4. MATERIALS

4.1 The laminated Cloth Hessian shall be manufactured from Jute fibre of good quality free from roots, cropends, cuttings, dust, dirt, dry pulp or any other unwanted matter and low density Polythene Film. Only virgin Polythene shall be used. No reclaimed Polythene shall be used.

# 5. MANUFACTURE

5.1 The yarns used shall be evenly spun and uniformly twisted. (There shall be no reed marks or gaps. The cloth shall be compattly woven with firm and straight selvedges, free from broken ends, weaving flaws, slubs, other defects. No weighting or filling materials shall be used.

- 5.2 The fabric shall be laminated on one side by Low Density Polythene film by a suitable process in such a way that it does not get tendered or damaged during the process of lamination.
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### 6. DIMENSIONS

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6.1 The finished Laminated Cloth Hessian shall conform to the dimensions as specified. in Appendix 'A' of this specification.

# 7. WORKMANSHIP AND FINISH

7.1 In appearance, shade, workmanship and finish and in all other respects not defined in this specification, the store shall conform to the sealed pattern held in in the custody of the Inspection Authority.

### 8. MARKING

8.1 Each roll shall be legibly and indelibly marked in 5 cm characters at both ends with Cat No, correct nomenclature, manufacturers name or recognised trade mark length and width of roll and year of manufacture. The marking shall be done with Ink Cloth marking.

### 9. PRE-INSPECTION

9.1 Manufacturers/Contractors must satisfy themselves that the stores are in accordance with the terms of the Contract and fully conform to the required specification by carrying out a thorough pre-inspection of each lot before actually tendering the same for inspection to Inspecting Officer mentioned under the terms of the contract. A declaration by the Contractor that necessary pre-inspection has been carried out on the store tendered will be submitted alongwith the challan. The declaration will also indicate the method followed in carrying out pre-inspection showing features checked/tested and will have the test certificate, attached to the Challan/ declaration.

9.2 If the Inspecting Officer finds that the pre.inspection.
of the consignment as required above has not been carried out, the consignment is liable for rejection.

### 10. INSPECTION

- 10.1 If, on examination, material from any portion of the consignment is found not to be fully in accordance with the specification the whole consignment is liable to be rejected.
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  Units for visual inspection be drawn as per column 2
  of the table using technique of random sampling
  as per IS: 4905.
- 11.3 On being satisfied with preliminary visual examination sample shall be drawn as per column 3 of the table from the sample units drawn for visual examination as per column 2 of the table.

### TABLE FOR SCALE OF SAMPLING

Lot size	Sample size for visual examination	Sample size for
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#### 12. PACKAGING

12.1 The laminated Cloth Messian shall be supplied in the form of rolls/belts measuring 90 m or as ordered. The store shall be delivered in new, dry and clean condition.

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In case of rolls the cloth shall be wound on wooden mandral of suitable diameter. Each roll/bolt shall be made into the unit pack by tying suitably with jute twine 3 ply at minimum three places. Suitable number of unit packs (rolls/bolts) shall be arranged and firmly tied with jute Twine 3 ply(double fold) in such a manner to form a compact bale of rectangular shape as for as possible. These shall then be finally wrapped with an inner and outer layer of laminated Cloth Hessian facing the laminated surface inside. Sufficient Cloth shall be wrapped to ensure full protection of the contents. The bales containing rolls shall not be pressed. The bale shall be proper-ly and securely stitched with double jute twine 3 ply with not less than 6 stitches/dm taking care not pierce inner wrapping during stitching. Sufficient cloth shall be pulled out at each corner to form 'ears' of about 15 cm in length. Slats of wood of 7 cm wide and 1 cm thick free from fat or other hands. from fot or other harmful fungal/insects attack or bamboo strips (both duly preserved) shall be placed at each edge of bale length wise and finally bound with at least 3 bands not more than 25 cm apart. Hot rolled steel strip(baling)/Mild St el for general Engg purposes (Variety No. V of IS: 280). The free ends of strappings shall be sealed with machine or rivetted firmly.

12.4 For Ordnance Fy. packing the store shall be packed as per details given in above paras to form 2 bale of gross mass of 255 kg 12.4 and for DOS. It shall be 40 kg.

Before despatch each bale shall be legibly and indelibly (by ink Cloth marking) marked by stencil showing the following details:

Nomenclature and Cat. Part No. of the Store.

Quantity packed in each bale. ii)

Lot and serial No. of bale. iii)

Month and year of packing. iv) Name and trade mark of manufacturer. V)

Gross mass of the bale in kg. vi)

Nam and address of the Consignce. vivid

I/Note No. & dt. viii) A/T/SO No. & date. ix)

The Store Shall be packed as perdetails given with above paras (X) 12.4 to form a bale of gross mass of 40.0 kg

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CONTROLLER CONTROLLERATE OF INSPECTION TEXTILES AND CLOTHING KANPUR

DATED

IS: 2508				1969		IS: 1964		IS: 1963		IS: 1954	Method of tests
1	1	1	1		•	1+ 10%	1+ 0.1		1+ 2	+ 0.5 cm	Tol.
Basic cloth 0.90- Jutecoating 9.92 Low Density Polythene	plain	4	1180	110 1098	110	400	0.70	47	47	102or as ordered	
Force required (Weave of (Materials (Density to seperate bothbasic (layers (warp & Cloth (layers (warp & Cloth (layers)))))))  west directions (layers) (lay	Force required (Weave of to seperate bothbasic layers (warp & cloth weft directions)	Force required to seperate (w. layers (w. weft direction)	Breaking load 10x20 cm bet grips in N Warp Weft	Breaking ne 10x20 cm grips in Warp W	polythe	Thickness Mass/Sq m in 'g' under pressure Finished Polythene of 210 'g'/Sq m cloth film in mm (Min)	(Thickness under pres) of 210 gin mm (Mir	eads/dn Weft	* XONORONE XXX #	Width in cm	· V