

SPECIFICATION NO.IND/GS/1589

Supersedes specn.No.IND/GS/1461

**GOVERNMENT OF INDIA,  
MINISTRY OF DEFENCE  
SPECIFICATION  
FOR  
TENT, ARCTIC, LARGE FRAMES VENTILATION TOP WINDOWS LARGE SMALL**

**ISSUED BY  
THE CONTROLLER,  
CONTROLLERATE OF QUALITY ASSURANCE(GENERAL STORES),  
POST BOX NO.127,  
KANPUR-208 004.**

Price: Rs.55.00

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**GOVERNMENT OF INDIA,**

**MINISTRY OF DEFENCE**

**DGQA ORGANISATION**

**SPECIFICATION**

**FOR**

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1. Scope
2. Materials
3. Manufacture & workmanship and finish
4. Dimensions and Tolerances
5. Marking
6. Sampling Plan & critiria of conformity
7. Pacaging

## **1. SCOPE**

1.1 This specification covers the requirements of the following stores required for use with Tent Arctic Large.Army Cat No. Designation TENT, ARCTIC, LARGE FRAMES A-3/8340-000554 VENTILATION TOP WINDOWS A-3/8340-000555 A-3/8340-000556 LARGE SMALL

## **2. MATERIALS**

2.1 The Frames shall be manufactured from the following materials :

- a. Timber - Any of the timbers given in the appendix to this specification.The timbers shall be well seasoned to a moisture content not exceeding 15 percent and the inclination of grain shall not exceed 1 in 15.The timber shall be free from centre heart (pith), sapwood (except in coniferous timbers), insect attack, dead knots, objectionable live knots, any kind of decay (rot), cracks, splits, warp and any other defect which would adversely affect the life or utility of the fabricated frames.
- b. Cast Acrylic sheets (Polymethyl : to IS:7569 Methacrylate sheet)of 1.6 mm thick (min)
  - (c) Paint RFU Priming Red Oxide for : to JSS-3-47-14 Wood Brushing/Spraying.
- c. Paint RFU Finishing War Equipment : to Specn No. Air drying Brushing/Spraying OG CQAEM/SS/95 Scamic ISC No. 294.

## **3. MANUFACTURE WORKMANSHIP AND FINISH**

3.1 The Frames shall be manufactured to the shape and design as shown in the plates attached to this specification.

3.2 Only one species of timber shall be used in the manufacture of any one frame.

3.3 The frames shall be properly made and all joints shall be properly glued and then secured by means of wooden/bamboo dowel pins.

3.4 Acrylic panes shall be properly and securely fitted as shown in plate attached to this specification.

3.5 The wood work shall be finished smooth all over and shall be rounded off at the corners as shown in the plates attached to this specification.

3.6 After inspection, the wooden portion of the frame shall be painted all over with Paint RFU priming Red Oxide for Wood Brushing/Spraying followed by two coats of Paint RFU. Finishing war equipment Air Drying Brushing/Spraying OG Scamic ISC No.294. The second coat to be applied after the first coat has thoroughly dried.

## **4. DIMENSIONS AND TOLERANCES**

4.1 The Frames shall conform to the dimensions as shown in the plate attached to this specification.

4.2 A tolerance on all dimensions shall be permitted as per coarse tolerance of IS:2102.

## **5. MARKING**

5.1 Each frame shall be legibly and indelibly marked with the manufacturer's name or initials or recognised trade mark, the year of manufacture and the relevant Catalogue Number as shown in the plates attached to this specification.

5.2 Each accepted frame shall be legibly and indelibly marked by the Inspecting Officer, adjacent to the manufacturer's marking using a steel stamp of size 12 mm.

5.3 Final rejection may be marked by Inspecting Officer by stamping letter 'X' on both the sides of the manufacturer's marking thus :-

A3/8340-000554

X MISTRY & CO X 1991

## **6. SAMPLING PLAN AND CRITERIA OF CONFORMITY**

6.1 Formation of Lot - The delivery shall be visually inspected by the inspecting Officer at the spot in the first instance to ascertain its homogeneity in respect of nature, size, shape, source and year of manufacture. If it is homogeneous the delivery shall be treated as one lot. If not, it shall be segregated by the supplier into separate groups so that each group, which is homogeneous within itself forms a lot. The supplier shall arrange the units of the homogeneous lot in such a way that all the units are easily accessible to the Inspecting Officer to enable him to draw samples from any portion of the homogeneous lot.

6.2 Sampling Procedure - Sampling of the stores shall be done adopting appropriate sampling method as per IS : 4905, so that samples drawn as per Table I & II given for assessing various quality requirements, are truly representative of the lot.

6.3 Scale of Sampling - The number of samples units to be drawn for assessing the quality of the store characteristic-wise, should be in accordance with the Table I for dimension/non-destructive/visual inspection and Table II for detailed lab. testing as given below :-

### **6.4 Criteria of Conformity**

All the sample - units as specified in Table I and II are required to be tested/inspected irrespective of the rejection number ( $=Ac + 1$ ) being achieved earlier. The lot shall be considered conforming to the specified quality if the number of defective units observed in the sample is not more than the respective acceptance number of each class of defects. When the sample- size equals or exceeds lot size do 100% inspection. The number of sample units to be sampled for lab. testing should be a multiple of the number of characteristics/tests which can not be carried out simultaneously on the same sample units.

6.5 Sampling Inspection - The Inspecting Officer shall draw sample as per Table I for dimensional/non-destructive/visual inspection to assess the quality of the lot. If the quality of the lot indicates conformity to the standard as laid down in Table I, sampling for lab. testing will be done, otherwise the lot shall be straightway rejected.

6.6 Sampling for Lab. Testing - If the lot is considered conforming to the quality standards as specified in Table I sampling for lab. testing shall be carried out as per Table II and the samples shall be subjected to the lab. testing.

6.7 Bulk Inspection - If the lab. test report indicates that the lot does not conform to the standards as specified in Table II, the whole lot shall be rejected. Otherwise the lot shall be inspected hundred percent thoroughly for workmanship, finish and other critical/major and visual defects. All items found defective shall be rejected.

### **TABLE I**

#### **SAMPLING PLAN FOR VISUAL INSPECTION**

**(Based on L.Q. 12.5%)**

Lot Size Sample Size Acceptance Number(n) (a)

16 to 25 13 0  
 26 to 50 15 0  
 51 to 90 16 0  
 91 to 150 18 0  
 151 to 280 20 0  
 281 to 500 32 1  
 501 to 1200 32 1  
 1201 to 3200 50 3  
 3201 to 10000 80 5  
 10001 to 35000 125 10  
 35001 to 150000 200 18  
 150001 to 500000 200 18  
 500001 and above 200 18

Note :-(i)The rejection number (r) will always be one more than the acceptance number (a).

(ii)When the sample size equals or exceeds lot size, do 100% inspection/testing with zero acceptance number.

Source :- ISO-2859/2-1985(E)

(Sampling Procedure for inspection by Attributes Part 2, sampling plans indexed by Limiting Quality(LQ) for isolated lot Inspection)

SPECIFICATION NO.IND/GS/1589

**TABLE II**  
**SAMPLING PLAN FOR LABORATORY TEST**  
**(Based on AQL 4%)**

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Lot Size Inspection Level I Inspection Level II

Sample Acceptance Sample Acceptance

Size Number Size Number

(n) (a) (n) (a)

\*\*\*\*\*

2 to 8 3 0 3 0

9 to 15 3 0 3 0

16 to 25 3 0 3 0

26 to 50 3 0 5 0

51 to 100 5 0 5 0

101 to 150 5 0 13 1

151 to 300 13 1 13 1

301 to 500 13 1 13 1

501 to 1000 13 1 20 2

1001 to 3000 13 1 32 3

3001 to 10000 20 2 32 3

10001 to 35000 20 2 50 5

35001 to 150000 32 3 80 7

150001 to 500000 32 3 80 7

500001 and above 50 5 125 10

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Note :-

- i. Level I for Chemical Test(Individual samples to be tested).
- ii. Level II for Physical Test(Individual samples to be tested).
- iii. The rejection number (r) will always be one more than the acceptance number (a).
- iv. When the sample size equals or exceeds lot size do 100% inspection/testing with zero acceptance number.
- v. Sample size pertains to 4% AQL or around.

Source :- IS:2500(Part I) 1973 (Sampling Inspection Tables).

## 7. PACKAGING

### 7.1 Material

- i. Cloth Hessian Medium - To IS:2818 Pt II
- ii. Twine Jute - To IS:1912
- iii. Paper Wrapping Waterproof plain - To IS:1398
- iv. Crates wood style No.1 Class 'A' - IS:3071-65 and CIGS/SS/135

## 7.2 Method

Two frames placed one above the other shall be tied with twine jute and six such pair shall be wrapped in paper wrapping waterproof to form a pack. Then the pack shall be wrapped with Cloth Hessian Medium and sewn securely and then packed in wooden crates. Note :- Each crate shall contain frames of one type only.

8. The front and top of each crate shall be marked in bold letters with Army Catalogue Number, designation of the store and the quantity packed. The back of the crate shall be marked with the name and address of the consignee as given in the contract, weight of the package in kg, number of the individual package and the total number of packages in the consignment. The left end of the crate shall be marked with the consignee's name or initials or recognised trade mark, the month and year of packing and the voucher number.

9. If ordered for delivery to a local Inspection Depot, the frames shall be delivered in firms returnable packs. After inspection, the accepted supplies shall be packed by the Inspection Depot authorities in accordance with paras 7.1 and 7.2.

### **APPENDIX, Para 2 (a)**

#### LIST OF TIMBERS (CONIFEROUS TIMBERS) TRADE NAME BOTANICAL NAME

Chir : *Pinus roxburghii*

Cypress : *Cupressus torulosa*

Deodar : *Cedrus deodara*

Fir : *Abies pindrow*

Kail : *Pinus wallichiana*

Khasipine : *Pinus insularis*

Spruce : *Picea smithiana*

#### **NON-CONIFEROUS TIMBERS**

Aini : *Artocarpus hirsuta*

Amoora : : *Amoora* sp.

Amari :

Bonsum : *Phoebe* sp.

Bijasal : *Pterocarpus marsupium*

Champ : *Michelia* sp.

Chaplash : *Artocarpus chaplasha*

Gamari : *Gmelina arborea*

Jarul : *Lagerstroemia flosreginae*

Kathal : Artocarpus heterophyllus

Kindal : Terminalia paniculata

Laurel : Terminalia tomentosa

Machilus : Machilus odoratissima

Sandan : Ougeinia oogeinensis

Sissoo : Dalbergia sissoo

Toon : Cedrela toona

Walnut : Juglans sp.

NOTE :Specification of various series mentioned above can be had on payment from the addresses as shown below :-

#### **SPECIFICATION SOURCE**

The Director General I.S. Series Bureau of Indian Standards Manak Bhawan 9, Bahadur Shah Zafar Marg, NEW DELHI-110 011. or the regional offices at Bombay, Calcutta, Madras and other branch offices.

IND/GS/Series The Controller or their regional establishment JSS & Supple. Controllerate of Schedule in Quality Assurance 1.Sr.Quality Assurance Officer CQA(GS) (GS), PB No.127, S.Q.A.Estt.(GS),(East India), KANPUR-208004. Hastings, CALCUTTA - 700022.

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3.The Quality Assurance Officer Q.A.Estt (GS), Central India, IND/TC Series The Controller P.B. No. 307, KANPUR-208004. Controllerate of Quality Assurance (T&C),PB No 294 KANPUR-208004.

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