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IS : 32 - 1971

*Indian Standard*

CODE FOR  
SEAWORTHY PACKAGING OF WOOLLEN  
AND WORSTED YARN AND CLOTH

( *Second Revision* )

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INDIAN STANDARDS INSTITUTION  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110001

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*Indian Standard*  
**CODE FOR**  
**SEAWORTHY PACKAGING OF WOOLLEN**  
**AND WORSTED YARN AND CLOTH**  
*( Second Revision )*

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*( Continued on page 2 )*

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*Indian Standard*  
CODE FOR  
SEAWORTHY PACKAGING OF WOOLLEN  
AND WORSTED YARN AND CLOTH  
( *Second Revision* )

**0. FOREWORD**

**0.1** This Indian Standard ( *Second Revision* ) was adopted by the Indian Standards Institution on 30 July 1971, after the draft finalized by the Wool and Wool Products Sectional Committee had been approved by the Textile Division Council.

**0.2** This standard which was first published in 1950 was revised in 1963 to prescribe the values for dimensions and quantities in metric system. The present revision has been taken up to bring the standard up to date with the co-operation of the Textiles Committee and the Indian Institute of Packaging.

**0.3** In the present revision the use of wax paper and cloth heavy cee have been dispensed with. Instead, hessian of light construction viz of 229 and 380 g/m<sup>2</sup> have been recommended. Hessian laminated with polyethylene film or high density polyethylene woven fabric may also be used in place of two layers of hessian and polyethylene film. In this standard, provision has also been made for using wooden or bamboo slats which have been given anti-termite treatment. The maximum gross weight of the bale or case has also been recommended to ensure safe transit.

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**1. SCOPE**

**1.1** This standard prescribes the procedure of packaging of woollen and worsted yarn and cloth to be exported overseas for their safe transit. The requirements of packing materials have also been specified.

**2. PACKING MATERIALS**

**2.1** The requirements of the packing materials specified in the standard are given in Table 1.

TABLE 1 REQUIREMENTS OF PACKING MATERIALS

( Clause 2.1 )

Sl. No.	MATERIAL	REQUIREMENT
(1)	(2)	(3)
i)	Waterproof paper	Conforming to Type 1 of IS : 1398-1968* using craft paper of substance 60 g/m <sup>2</sup> and above
ii)	Folding box board	Conforming to IS : 1776-1961†
iii)	Polyethylene film	Thickness — 75 microns, <i>Min</i> and conforming to Grade 123 of IS : 2508-1963‡
iv)	Hessian ( 229 g/m <sup>2</sup> )	Conforming to Type II of IS : 2818 ( Part II )-1971§
v)	Hessian ( 380 g/m <sup>2</sup> )	Constructional particulars as agreed to between the buyer and the seller
vi)	High density polyethylene woven fabric	Conforming to Table 1 of IS : 6340 -1971   the fabric shall be laminated with polyethylene of thickness not less than 25 microns
vii)	Cardboard pieces	Thickness — 2 mm, <i>Min</i>
viii)	Wooden or bamboo slats	Width — 4 cm, <i>Min</i> and thickness — 2 cm, <i>Min</i> ; the slats shall be given anti-termite treatment ( see IS : 401-1967¶ )
ix)	Wooden case	Conforming to class A, Style 3 ( b ) of IS : 1503-1967**
x)	Steel strips ( for bale packing )	Width — 20 mm, <i>Min</i> and thickness 0.9 mm <i>Min</i> ; the strips shall conform to medium grade of IS : 1029-1956†† and shall be given one coat of priming red oxide or red lead paint
xi)	Steel strips ( for case packing )	Width — 20 mm, <i>Min</i> , thickness — 0.7 mm <i>Min</i> ; the strips shall conform to hard grade of IS : 1029-1956††

\*Specification for packing paper, waterproof, bitumen-laminated ( *first revision* ).

†Specification for folding box board, uncoated.

‡Specification for low density polyethylene films.

§Specification for Indian hessian: Part II 305 and 229 g/m<sup>2</sup> at 16 percent contract regain ( *first revision* ).

||Specification for high density polyethylene woven sacks.

¶Code of practice for preservation of timber ( *second revision* ).\*\*Specification for wooden packing cases ( *first revision* ).††Specification for hot rolled steel strips ( *baling* ).



### 3. PACKING PROCEDURE

#### 3.1 Yarn ( Hanks ) in Bales

**3.1.1 Make-up of Hanks** — Hanks shall be made into bundles of 5 kg each. The bundles shall be sprinkled with sufficient quantity of DDT, PDCB or any other suitable insecticides to ensure protection against attack by insects. Each bundle shall then be wrapped in polyethylene film or put in a bag made of such polyethylene film. The bundles shall be tied at 3 places with jute or cotton twine.

**3.1.2 Make-up of Bale** — The bale shall satisfy the following requirements:

- a) The sequence of layers is hessian ( 229 g/m<sup>2</sup> ), polyethylene film and hessian ( 380 g/m<sup>2</sup> ) in such a way that when the bale is finally made up, the hessian ( 380 g/m<sup>2</sup> ) forms the outermost layer. A layer of hessian ( 229 g/m<sup>2</sup> ) laminated with polyethylene film or high density polyethylene woven fabric may be used as an alternate to the first two layers. The packing materials are in sound and dry condition. The overlaps of the outermost layer of hessian are such that they can be properly and securely stitched. The overlaps of the other layers are at least 10 cm.
- b) The lips of end pieces of hessian forming the outermost layer are stitched with 2 strands of jute twine of adequate strength with at least 2 stitches/dm.
- c) The bale is bound by cross hooping the steel strips over cardboard pieces at right angles to both the length and width of bale. The strips nearest to the edges are appearing 13 cm away from the respective edges and other strips are equally positioned at approximately 13 cm from each other in the lengthwise direction and 25 cm from each other in the widthwise direction. The hoops are in a tight condition when the bale is released from the press.

NOTE — Wooden or bamboo slats of adequate length and strength may be used under the hoops at each of the 8 edges of the bale in place of cardboard pieces.

- d) The gross weight of the bale does not normally exceed 100 kg when the bale is packed.
- e) Each bale is provided with a pocket for keeping the packing slip.

#### 3.2 Yarn ( Hanks, Cheeses or Balls ) in Cases

**3.2.1 Make-up of Pieces** — The hanks, cheeses or balls shall be sprinkled with sufficient quantity of DDT, PDCB or any other suitable insecticides to ensure protection against attack by insects. A sufficient number of hanks, cheeses or balls shall be placed in a bag made of polyethylene film.

**3.2.2 Make-up of Cases** — The cases shall satisfy the following requirements:

- a) The sequence of layers is waterproof paper and folding box board in such a way that when the wooden case is fully packed, the waterproof paper forms the outermost layer. The wrapping materials are in sound, clean and dry condition and are of such size that the overlaps of all layers are at least 10 cm.
- b) The outermost layer is sealed with a suitable waterproof adhesive and the lid firmly nailed to the case.
- c) The case is bound with steel strips in such a way that at least 3 strips are positioned parallel to the battens and at least 2 strips are positioned at right angles to the battens, the strips being in a tight condition.
- d) The gross weight of the case does not normally exceed 120 kg.

### **3.3 Cloth in Bales**

**3.3.1 Make-up of Pieces** — Each piece of cloth shall be sprinkled with sufficient quantity of DDT, PDCB, or any other suitable insecticides so as to ensure protection against attack by insects in case cloth has not already been given mothproof treatment during manufacture. Each piece shall be folded or wrapped on cardboard or strawboard of suitable size and thickness which has previously been covered with kraft paper. Each piece shall then be wrapped with kraft paper and then with polyethylene film. The edges of the polyethylene film shall be sealed.

*NOTE* — In case of coarse fabric, kraft paper for wrapping the pieces may be dispensed with, if felt necessary.

**3.3.2 Make-up of Bale** — The bale shall satisfy the requirements given in 3.1.2.

### **3.4 Cloth in Cases**

**3.4.1 Make-up of Pieces** — The pieces shall be made up as given in 3.3.1.

**3.4.2** The cases shall satisfy the following requirements:

- a) The sequence of layers is polyethylene film and waterproof paper in such a way that when the wooden case is fully packed, the polyethylene film forms the outermost layer. The wrapping materials are in sound, clean and dry condition and are of such size that the overlaps of all layers are at least 10 cm.
- b) The outermost layer is sealed with a suitable waterproof adhesive and the lid firmly nailed to the case.

- c) The case is bound with steel strips in such a way that at least 3 strips are positioned parallel to the battens and 2 strips are positioned at right angles to the battens, the strips being in a tight condition.
- d) The gross weight of the case does not normally exceed 150 kg.

#### **4. MARKING**

**4.1** Bales or wooden cases shall be marked in indelible ink with the following information:

- a) Name of the material;
- b) Quantity in case of cloth or count in case of yarn;
- c) Gross weight;
- d) Net weight;
- e) Manufacturer's name, initials or trade-mark; and
- f) Any other information required by the buyer or by the law in force.

**4.2** All markings shall be stencilled; writing with hand being not permissible.

**4.3** The letters and figures shall be not less than 4 cm in height.

# INDIAN STANDARDS

## ON

### WOOL AND MILL-MADE WOOL PRODUCTS

#### IS :

- 11-1963 Grading of wool for export (*revised*)
- 673-1963 Cloth, woollen, twill, dyed (*revised*)
- 674-1963 Flannel, hospital, grey (*revised*)
- 675-1963 Cloth, bunting, worsted (*revised*)
- 676-1963 Bunting, worsted (*revised*)
- 677-1963 Cloth, drab mixture, woollen (water resistant) No. 1 (*revised*)
- 678-1963 Cloth, drab mixture, woollen (water resistant) No. 2 (*revised*)
- 679-1963 Great coat cloth, woollen (*revised*)
- 680-1963 Cloth barathea (*revised*)
- 741-1971 Code for inland packaging of woollen and worsted yarn and cloth (*first revision*)
  
- 1530-1972 Baize cloth (*first revision*)
- 1531-1972 Blanketing cloth (*first revision*)
- 1681-1972 Hospital blankets, woollen, dyed (*first revision*)
- 1719-1969 Felt, woollen (*first revision*)
- 1721-1970 Hair belting yarn (*revised*)
- 1793-1972 Guide for marking textile materials made of wool (*first revision*)
- 2156-1962 Code for packing raw wool export
- 2319-1970 Serge (*first revision*)
- 2900-1970 Grading of raw wool for internal market (*first revision*)
- 5910-1970 Fineness grades of wool
- 5911-1970 Fineness grades of wool tops
- 6054-1970 Clearer cloth
- 6055-1970 Flannel, sizing

# PUBLICATIONS OF INDIAN STANDARDS INSTITUTION

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Aeronautical textiles	Rayon fabrics, handloom
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Grading of raw silk	Terminology
Hosiery	Textile floor coverings
Jute — bags and fabrics	Textile materials for fishing
Jute mill accessories	Textile mill accessories ( other than jute mills )
Narrow fabrics	Twines
National flag of India	Weaving machinery components
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Physical test methods	Unclassified
Rayon fabrics	

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