भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

Draft for comments only Doc No.: TXD 20 (28872)
October 2025

भारतीय मानक मसौदा

वस्त्रादि — पीक टोपी — विशिष्टि

Draft Indian Standard

TEXTILES — PEAK CAP — SPECIFICATION

ICS: 61.040

Made up textiles (Including Ready-Made Garments) Sectional Committee, TXD 20

Last Date of Receipt of Comments
31st October 2025

FOREWORD

(*Formal clauses will be added later*)

A peak cap, also known as a service cap or visor cap, is a type of headgear commonly worn as part of military, police, or other uniformed services. It features a flat circular crown, a stiff peak at the front, and often includes a headband. The cap is designed to provide a formal appearance and may also serve to shield the eyes from sunlight. It is an essential part of ceremonial and dress uniforms in many countries.

This standard has been formulated in consideration of the requirements of police service uniforms in India, with the objective of promoting uniformity under the 'One Nation, One Uniform' initiative.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded of in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1 SCOPE

This standard specifies the performance and dimensional requirements for peak cap.

2 REFERENCES

The standards listed in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard

are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

3 TERMINOLOGY

3.1 Peak Cap — A peak cap is a structured, round-shaped headgear with a flat or slightly domed top, referred to as the crown, which may be sloping in design. It features a stiff, horizontal peak (visor) extending from the front and is generally provided with a band or strap above the peak. It is commonly worn by personnel in the military, police, paramilitary forces, and other uniformed services.

3.2 Crown — The crown of a peak cap is the upper, slightly sloped portion that covers the top of the head. The crown is attached to the cap band at its base and contributes to the overall height, structure, and formal appearance of the cap.

3.3 Bevel — It is the portion of the peak cap that connects the crown, located at the top side, to the headband, situated at the bottom.

3.4 Headband — The headband of a peak cap refers to the band or strip that encircles the inside base of the bevel, resting directly against the wearer's forehead and head.

3.5 Peak — The peak is the stiff, forward-projecting part of the cap, attached at the front of the crown, designed to provide shade and protection to the wearer’s eyes and face. It is typically constructed from a rigid base material, such as plastic or compressed board, and covered with fabric or synthetic leather matching the cap's design.

3.6 Chin Strap — The chin strap of a peak cap is a narrow strap or band, typically made of leather, synthetic leather, or coated fabric, positioned above the visor (peak) and attached at both ends to the cap band using metallic buttons or fasteners. While primarily decorative in formal uniforms, it may also serve to secure the cap under the chin in functional variants. The chin strap contributes to the formal appearance and completes the front profile of the cap.

4 MANUFACTURE

4.1 Crown

The crown of the peak cap shall be made from a single piece of gabardine fabric. The edges of the crown shall be secured to the bevel with a piping of cotton twine having minimum 2 mm thickness, inserted in the seam. The inner lining for crown shall be of polythene film of (0.05 ± 0.01) mm thickness.

4.2 Bevel

Bevel shall be made of the identical fabric as of the crown cloth. The bevel is prepared using four prices of fabric and stitched together. The front of the bevel shall be in line with the nose.

The rear joint shall preferably be at an angle of 180 degrees to the front joint, the two side joints shall preferably being at 90 degrees and 270 degrees respectively.

4.3 Headband

The headband shall be made using an outer layer of same fabric as of crown, a interlining of stiffener made of LDPE sheet having approximately 60 mm uniform width. The inner layer of headband shall be provided with a Racine/leather band on the inner circumference having approximate 51 mm thickness along with PU leather cloth of minimum 1 mm thickness. On the inner circumference headband shall be provided with a sweat band of brown velvet binding cloth of 30 mm width. The head band shall be firmly joined to the bevel by seam.

4.4 Peak

The peak shall be constructed using a low-density polyethylene (LDPE) sheet, sandwiched between outer and inner layers made with the same gabardine fabric as used for the crown, ensuring uniform appearance. The peak shall be fixed to the headband by machine stitching.

4.6 Chin Strap

Each cap shall be fitted with a chin strap of slide type made of racine/leather. Two buttons of (13 ± 1) mm metallic button with nickel chromium plated, embossed Ashoka emblem shall be fixed on either end of the chin strap. Chin strap shall be fitted with adjustable strips/buckle made of leather or racine, having 20 mm width, positioned on either side of the cap. These adjustable strips shall be placed preferably 5 cm away from the centre of the peak, ensuring symmetrical alignment. The chin strap shall remain fully stretched in the normal resting position of the cap. The width of the chin strap shall be (15 ± 1) mm.

4.7 Front Support

The cap shall be provided with a steel strip 0.8 mm nominal thickness as a front support for the crown. This supports the crown and cap badge to remain vertical without sagging.

4.8 Eyelets

Two brass eyelets of 5 mm size shall be fitted on the bevel at each side of peak cap approximately 20 mm apart.

4.9 For sewing spun polyester sewing thread of 125 d tex/3 conforming to IS 9543 and preferably of the same shade as that of component being stitched preferably shall be used.

5 WORKMANSHIP AND FINISH

5.1 The peak cap shall be made of uniform shape, finish, and workmanship throughout;

a) Free from yarn, weaving, wet processing, garmenting defects and any other spots defects that could affect their appearance and/or their serviceability;
b) Made such that all seams are smooth and sewing is free from pleats and puckers;
c) Made such that all ends of sewing have been trimmed and loose threads removed; and
d) Delivered in a clean and commercially dry condition.

6 REQUIREMENTS

6.1 The outer fabric of the peak cap used for crown, bevel, headband and peak shall confirm to the requirements as specified in Table 1 and the inner lining material used for the crown and bevel shall confirm to the requirements as specified in Table 2.

Table 1 Outer Fabric Requirements
(*Clause* 6.1)

Sl No.	Parameters	Requirements	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Fibre composition, percent	Polyester – 67 ± 3 Cotton – 33 ± 3	IS 667 IS 3416
ii)	Mass, g/m^2	250 ± 10	IS 1964
iii)	Width, cm, *Min*	150	IS 1954
iv)	Ends per cm, nominal	45	IS 1963
v)	Picks per cm, nominal	22	IS 1963
vi)	Breaking strength, N, *Min* a) Warp b) Weft	 1800 800	IS 1969 (Part 1)
vii)	Tearing strength, N, *Min* a) Warp b) Weft	 15 15	ISO 13937-2
viii)	Spray rating test	3 or better	IS 390
ix)	Colour fastness to: a) Light b) Washing c) Perspiration (Acid & Alkali) d) Rubbing i) Dry ii) Wet	 5 or better 4 or better 4 or better 4 or better 4 or better	 IS/ISO 105-B02 IS/ISO 105-C10 IS/ISO 105-E04 IS/ISO 105-X12
x)	Dimensional stability, *Max* a) Warp b) Weft	1.5	IS 2977
xi)	*p*H Value	6-8.5	IS 1390
xii)	Nature of dye	Vat and Disperse	IS 4472 (Part 3)
xiii)	Weave	Gabardine	Visual
xiv)	Scouring loss, percent, *Max*	2.0	IS 1383

Table 2 Requirements of Inner Lining Material
(*Clause* 6.1)

Sl No.	Parameters	Requirements	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Material	100% Polyester	IS 667
ii)	Mass, g/m^2	70 ± 10	IS 1964
iii)	Ends per cm, nominal	47	IS 1963
iv)	Picks per cm, nominal	32	IS 1963
v)	Breaking strength (5cm ×20 cm. between the grip), N, *Min* a) Warp b) Weft	 550 450	IS 1969 (Part 1)
vi)	Dimensional stability, percent, *Max* a) Warp b) Weft	 1.5 1.5	IS 2977
vii)	Colour fastness to: a) Light b) Washing c) Perspiration	 4 or better 4 or better 4 or better	 IS/ISO 105-B02 IS/ISO 105-C10 IS/ISO 105-E04
viii)	Weave	Plain	Visual

6.2 DIMENSIONS

The general diagram of peak cap is shown in Fig 1. The dimensions of the various sizes of peak cap shall conform to Table 3.

Table 3 Size Chart of Peak Cap
(*Clause* 6.2)

Sl No.	Size	Diameter of Crown, cm	Internal Circumference, cm	Bevel Depth (in front), cm	Bevel Depth (in back), cm	Peak Width at Center, cm
(1)	(2)	(3)	(4)	(5)	(6)	(7)
i)	6	24	49	5	4	5.5
ii)	6 ¼	25	50			
iii)	6 ⅜	25.5	51			
iv)	6 ½	25.5	52			
v)	6 ⅝	26	53			
vi)	6 ¾	26	54			
vii)	6 ⅞	26.5	55			
viii)	7	26.5	56			
ix)	7 ⅛	27	57			

x)	7 ¼	27	58			
xi)	7 ½	28	60			
xii)	8	29	64			
xiii)	Tolerance	± 0.5 cm		± 0.2 cm		
xiv)	Method of Test, Ref to	Annex B	Annex C	Annex D	Annex D	Annex E

6.3 Sealed Sample

6.3.1 In order to illustrate or specify the indeterminable characteristics, such as general appearance, luster, feel and shade, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

6.3.2 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

7 MARKING

7.1 Peak cap shall be stitched with marking label made of cloth taffeta synthetic white of suitable size stitched on centre of inner lining of the crown showing as follows:

a) Size of peak cap;
b) Manufacturers name initials or recognized trade mark; and
c) Year of manufacturing.

7.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

8 PACKING

The peak cap shall be packed as agreed to between buyer and the seller.

9 SAMPLING

9.1 Lot

In any consignment all the peak caps of the same size, same fabric material and colour delivered to a buyer against a dispatch note shall constitute a lot.

9.2 The conformity of the lot to the various requirements specified in the standard shall be determined on the basis of tests carried out on the sample selected from the lot.

9.3 For selection of samples at random from the lot, procedure given in IS 4905 may be followed.

9.4 Number of Samples and Criteria for Conformity

9.4.1 The conformity of the lot to the requirements of this specification shall be determined on the basis of the tests carried out on the samples selected from it.

9.4.2 Unless otherwise agreed to between the buyer and the seller, the number of peak caps, depending upon the size of the lot, shall be selected at random in accordance with col (3) of Table 4.

Table 4 Sampling and Permissible Number
(*Clause* 9.4.2)

Sl No.	Lot size in sets	Sampling Plan For						
		Visual examination/dimension check at the time of sampling (L-1)		Sample size for detail check at bulk QA stage (L-II)	Physical parameters (for laboratory tests) (S-4)		Chemical parameters (for laboratory tests) (S-2)	
		Sample Size	Acceptance No.		Sample size	Acceptance No.	Sample size	Acceptance No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
i)	Up to 280	13	1	32	13	1	5	0
ii)	281 to 500	20	2	50	13	1	5	0
iii)	501 to 1200	32	3	80	20	2	5	0
iv)	1201 to 3200	50	5	125	32	3	5	1
v)	3201 to 10000	80	7	200	32	3	5	1

NOTE — Total Acceptance No. mentioned in col no. (6) for physical parameter is inclusive of Acceptance No. mentioned at col no. (8) for chemical parameter

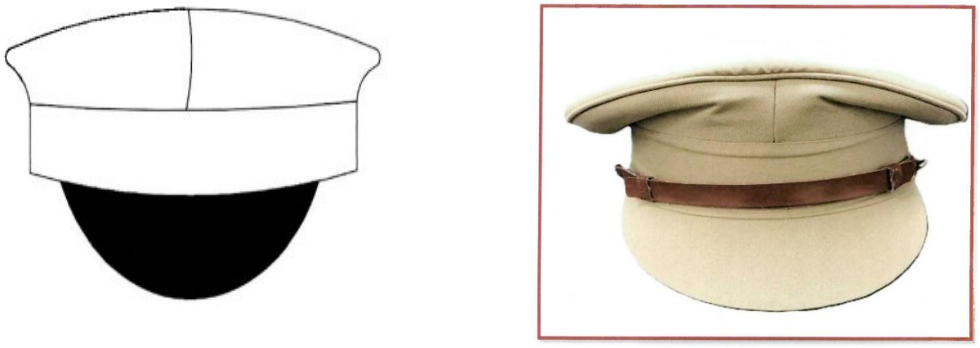

FIG. 1 FRONT VIEW

FIG. 2 SIDE VIEW

Peak Cap

ANNEX A
(*Clause* 2)

LIST OF REFERED STANDARDS

IS No.	*Title*
105-B02 : 2014	Textiles — Tests for colour fastness — Part B02 Colour fastness to artificial light: Xenon arc fading lamp test
105-C10 : 2006	Textiles — Tests for colour fastness Part C10 Colour fastness to washing with soap or soap and soda
105-E04 : 2013	Textiles — Tests for colour fastness Part E04 Colour fastness to perspiration (*first revision*)
105-X12 : 2016	Textiles – Tests for colour fastness Part X12 Colour fastness to rubbing (*first revision*)
IS 390 : 2024 ISO 4920 : 2012	Textile fabrics — Determination of resistance to surface wetting (spray test) (*second revision*)
IS 667 : 1981	Method for identification of textile fibres (*first revision*)
IS 1383 : 2023	Methods for determination of scouring loss in grey and finished cotton textile materials (*second revision*)
IS 1390 : 2022 ISO 3071 : 2020	Textiles — Determination of pH of aqueous extract (*third revision*)
IS 1954 : 2024 ISO 22198 : 2006	Textiles — Fabrics — Determination of width and length (*third revision*)
IS 1963 : 1981	Methods for determination of threads per unit length in woven fabrics (*second revision*)
IS 1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics (*second revision*)
IS 1969 (Part 1) : 2018	Textiles — Tensile properties of fabrics — Part 1 Determination of maximum force and elongation at maximum force using the strip method (*fourth revision*)
IS 2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water (*first revision*)
IS 3416 : 2024 ISO 1833-11 : 2017	Textiles — Quantitative chemical analysis — Mixtures of certain cellulose fibres with certain other fibres (method using sulphuric acid) (*third revision*)
IS 4472 (Part 3) : 2021	Textile dyestuffs — Identification of the application classes of dyes on textile materials Part 3 Man-made fibres (*first revision*)
IS 4905 : 2015 ISO 24153 : 2009	Random sampling and randomization procedures (*first revision*)
IS 7016 (Part 1/Sec 1) : 2022 ISO 2286-1 : 2016	Methods of test for rubber or plastics coated fabrics Part 1 Determination of roll characteristics Section 1 Methods for determination of length, width and net mass (*third revision*)
IS 9543 : 2015	Textiles — Spun polyester sewing threads — Specification (*first revision*)
ISO 13937 (Part 2) : 2000	Textiles — Tear properties of fabrics — Part 2: Determination of tear force of trouser-shaped test specimens (Single tear method)

ANNEX B
(*Table* 3, *Sl No*. xiv)

DETERMINATION OF THE DIAMETER OF THE CROWN OF PEAK CAP

B-1 SCOPE

This test method specifies the procedure for the measurement of the crown diameter of a peak (peaked) cap intended for use as uniform/headgear.

B-2 APPARATUS

B-2.1 A steel rule graduated in millimetres with least count 1 mm and accuracy ± 0.5 mm.

B-2.2 Vernier caliper (optional) with accuracy ± 0.1 mm.

B-2.3 Flat horizontal surface (measuring table).

B-3 PROCEDURE

B-3.1 Place the cap on a flat horizontal surface with the crown facing upwards, ensuring that the cap is not deformed by pressure. Identify the widest circular part of the crown. Measure the maximum diameter of the crown from one outer edge to the opposite outer edge using the measuring steel rule or Vernier caliper. Rotate the cap by approximately 90 degrees and take a second measurement of the diameter at right angles to the first.

B-3.2 Report the diameter of crown as average of the two measurements.

ANNEX C
(*Table* 3, *Sl No*. xiv)

DETERMINATION OF THE INTERNAL CIRCUMFERENCE OF THE PEAK CAP

C-1 APPARATUS

C-1.1 A flexible measuring tape graduated in millimetres, with accuracy of ± 0.5 mm.

C-1.2 A flat table for supporting the cap.

C-2 PROCEDURE

C-2.1 Place the cap on a flat table with the opening facing upwards. Identify the sweatband line (the inner band that comes in contact with the wearer's head).

C-2.2 Insert the flexible measuring tape along the inner circumference of the sweatband, ensuring it follows the entire contour without twists, folds or gaps. Read the length where the tape overlaps the zero mark. Record the value to the nearest millimetre. Repeat the measurement once more, after removing and re-seating the tape.

C-2.3 Report the inner circumference as average of the two measurements.

ANNEX D
(*Table* 3, *Sl No*. xiv)

DETERMINATION OF THE BEVEL DEPTH OF THE PEAK CAP

D-1 SCOPE

This test method specifies the procedure for determining the bevel depth at the front and back of a peak cap. The bevel depth is defined as the vertical distance from the top edge of the headband to the junction line of the crown with bevel.

D-2 APPARATUS

D-2.1 Steel rule or vernier caliper graduated in millimetres, with an accuracy of ± 0.5 mm.

D-2.1 Flat horizontal surface for supporting the cap.

D-3 SAMPLING

D-3.1 Place the cap upright on a flat horizontal surface in its natural position. Identify the measurement point at the front: the mid-point above the peak at the centreline.

D-3.2 Place the ruler or caliper perpendicular to the plane of the headband. Measure the vertical distance from the top edge of the headband up to the junction line between the crown and bevel. Record this as front bevel depth, to the nearest millimetre. Repeat the procedure at the back mid-point of the cap and record this as back bevel depth (Bb).

ANNEX E
(*Table* 3, *Sl No*. xiv)

DETERMINATION OF THE PEAK WIDTH AT CENTER OF THE PEAK CAP

E-1 SCOPE

This test method specifies the procedure for determining the width of the peak at the centre of a peak cap. The width is defined as the perpendicular distance between the outer edge of the peak and the junction line of the peak with the cap band along the vertical centreline of the cap.

E-2 APPARATUS

E-2.1 Steel rule or vernier caliper graduated in millimetres, with an accuracy of ± 0.5 mm.

E-2.2 Flat horizontal surface for positioning the cap.

E-3 PROCEDURE

E-3.1 Place the cap on a flat horizontal surface in its natural wearing position. Identify the centreline of the cap passing through the midpoint of the peak and crown.

E-3.2 At this centreline, position the steel rule or vernier caliper perpendicular to the junction between peak and cap head band. Measure the distance from the junction point of peak and band to the outermost free edge of the peak along this line. Record the reading to the nearest millimetre as the peak width at centre.