



**Technical Specification for
CAP, CEREMONIAL,
Rifle Band, Other Ranks (Shako)**

Defence Clothing (DC)

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PREFACE

TABLE 1 – PRODUCT LIST

| | |
|--------------------------------|--|
| Item Name | CAP, CEREMONIAL, Rifle Band, Other Ranks (Shako) |
| NATO Stock Number | 8405-99-500-7443 |
| Pattern Number | 29450A |
| Development File No | DCIPT/RDG/NR/27/08 |
| Product Support File No | N/A |

Any colour shown in this document is for representation and must not be used for colour matching.

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TABLE 2 – ISSUE RECORD

| Issue No | Comments | Issue Date |
|----------|--|------------------|
| 2 | Formatting updated Table 3: Related specifications and documents reviewed and updated. UK/SC/4687 updated to UK/SC/5126. BS EN ISO 139 added as called up in Table 10 Para 4.2: Cloth for crown updated to headwear quality melton Para 4.13: Sewing thread details added to table Section 4: Labelling updated to include date of manufacture, broad arrow and fibre content Table 7: Tolerances added | 26 February 2018 |
| 1 | New specification | 12 January 2011 |

PART 1

1. THE PRODUCT

- a. Use of the Product A black, synthetic fur shako worn by The Rifle Band, Other Ranks.

FIGURE 1



TABLE 3 – RELATED SPECIFICATIONS AND DOCUMENTS

| Specification/Document | Detail |
|---------------------------------------|--|
| BS EN ISO 105 Part B02 Part E01 | Textiles. Test for colour fastness Colour fastness to artificial light: Xenon arc fading lamp Colour fastness to water |
| BS EN ISO 139 | Textiles. Standard atmospheres for conditioning and testing |
| BS EN 12590 | Textiles. Industrial sewing threads made wholly or partially from Synthetic fibres |
| BS 3870 Part 1 Part 2 | Stitches and seams Classification and terminology of stitch type Classification and terminology of seam type |
| UK/SC/5126 | Insignia, buttons, pins and titles manufactured from gilding metal, brass and nickle silver |
| UK/SC/5516 | Cloth, melton, wool, for dress uniforms |
| UK/SC/5574 | Straps, chin, various |
| UK/SC/5696 | Leather, sheep, headleathers |

2. PATTERNS

- a. Master Patterns DC holds a Master Pattern for this product. Potential contractors may view the pattern on site by arrangement with the DC Commercial Department.
- b. Standard Patterns A Standard Pattern may be obtained from the DC Technical Information Office and may be used to provide the criteria for all materials, components and manufacturing features not fully defined in this specification.

PART 2

3. PRODUCT DESIGN

- a. Product Description Synthetic fur, ceremonial shako style hat to be worn by Other Ranks. Including a boss at the front, badge at the rear, and chin strap. Provided as outside only.

TABLE 4 – PRODUCT COMPONENTS

| | |
|---------------------------|--|
| 4.1 Cloth for outer cover | <ul style="list-style-type: none"> • Cloth, black, synthetic fur to match standard pattern • To meet the colour fastness requirements of Table 9 |
| 4.2 Cloth for crown | <ul style="list-style-type: none"> • Cloth, melton wool, plain weave • Mass 395-420g/m² • Blown finish • Shade and finish to match Pattern No 8849E, Rifle Green • Colourfastness and steam shrinkage requirements to meet those in UK/SC/5516 |
| 4.3 Cloth for lining | <ul style="list-style-type: none"> • Cloth, twill, cotton, black |
| 4.4 Sides (foundation) | <ul style="list-style-type: none"> • Cloth, viscose, hemp hair 213g/m² adhesively bonded to cloth hemp 191g/m² • Or a suitable alternative to be approved by DC |
| 4.5 Head leather | <ul style="list-style-type: none"> • Sheep, natural at least 1mm thick but no more than 1.2mm thick to UK/SC/5696 • Or a suitable alternative to be approved by DC |
| 4.6 Chin strap hooks | <ul style="list-style-type: none"> • Brass, self coloured, size and shape as on standard pattern |
| 4.7 Chin strap | <ul style="list-style-type: none"> • Strap, chin, cap ceremonial, Rifle band, other ranks • UK/SC/5574, Pattern No D02020, NATO Stock No 8415-99-397-4633 |
| 4.8 Plume holder | <ul style="list-style-type: none"> • Brass with screw fixing, self coloured, size and shape as on standard pattern |
| 4.9 Cord for bevel | <ul style="list-style-type: none"> • Black, 8mm rounded, Russia weave as on standard pattern |
| 4.10 Badge | <ul style="list-style-type: none"> • As on standard pattern |
| 4.11 Ring | <ul style="list-style-type: none"> • Ring, nickel plated, internal circumference 9.5mm external circumference 14mm |

TABLE 4 – PRODUCT COMPONENTS continued

| | |
|--------------------------------------|--|
| 4.12 Boss | <ul style="list-style-type: none"> • Insignia, Organisation, Shako, The Rifles Band and Bugles • UK/SC/5126, Pattern No D02151, NATO Stock No 8455-99-151-8667 |
| 4.13 Sewing threads for all purposes | <ul style="list-style-type: none"> • Thread, polyester/cotton, corespun to BS EN 12590 Table 5 • Ticket No.25, black, for fastening crown, headband stabiliser headleather, plume holder and straps • Ticket No.75, black, for all other purposes |

TABLE 5 – PRODUCT CONSTRUCTION

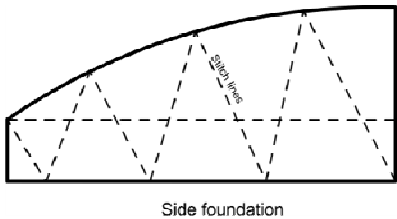
| | |
|---|---|
| <p>5.1 Sides foundations</p>  | <ul style="list-style-type: none"> • Two plies of bonded hair cloth/hemp are to be sewn with vertical rows of stitching, 2.5cm apart penetrating all layers • Cut and shaped as the standard pattern • Single ply of bonded hair cloth/hemp to form a 2cm join using seam type 2.01.01 at the centre front • All three pieces (two sides and front) to be covered in lining fabric • Stitched through to create a neat finish as shown on diagram |
| 5.2 Plume holder | <ul style="list-style-type: none"> • Plume holder to be securely attached to the front of the foundation front • Plume holder should protrude 0.7cm above the foundation |
| 5.3 Chin strap hooks | <ul style="list-style-type: none"> • Hooks to be securely attached to the side of the foundation • Bottom of the hook to be positioned 6.5cm above the bottom of the side foundations and 8.5cm from the front foundation seam |
| 5.4 Crown | <ul style="list-style-type: none"> • Single ply of wool fabric and single ply of lining fabric to be bonded together • The crown is to be securely combined to lining with a suitable adhesive to form a waterproof barrier and the laminate produced is to comply with the requirements set out in Table 10 • The bond is to be continuous to ensure that the outer material is free from blisters • Shaped as the standard pattern • Crown to be securely attached to the top edge of the foundation |

TABLE 5 – PRODUCT CONSTRUCTION continued

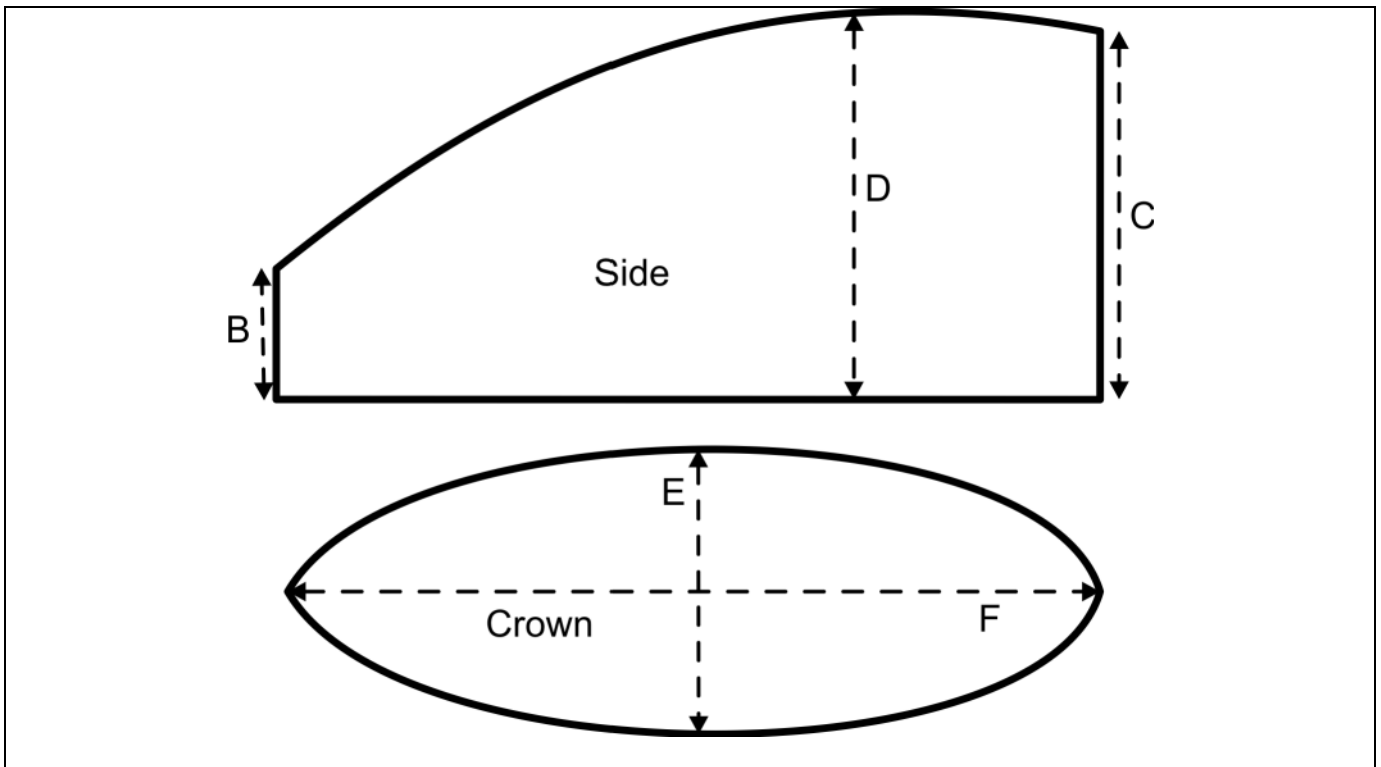
| | |
|-------------------------------------|---|
| 5.5 Cover | <ul style="list-style-type: none"> • Synthetic fur to be cut two piece shaped as standard pattern • Pile to lay, front to back, as standard pattern • Seams at centre front and back using seam type 1.01.01 • Seams to be carefully constructed to ensure that the pile of the fabric appears to be continuous • Fur to be securely attached to the foundation to give a neat and unstretched appearance |
| 5.6 Head leather | <ul style="list-style-type: none"> • One piece brachered head leather is to be securely attached to the bottom edge of the fur • Finished depth 4cm • Securely bonded to the inside of the cap with appropriate adhesive |
| 5.7 Braiding | <ul style="list-style-type: none"> • Double strand of braiding to be securely attached to the cap, stitching to penetrate all layers • Positioned as on standard pattern, to line up with base of cap at centre back, side to finish 10cm from base • Knotted braiding to be constructed as on standard pattern • Positioned as standard pattern, to line up with base of cap at centre front, sides to finish so as to cover the end of the double strand • Securely attached and to penetrate all layers |
| 5.8 Boss | <ul style="list-style-type: none"> • A slit is to be formed at the centre front of the cap • 0.5cm wide and positioned 3cm from top to take boss |
| 5.9 Badge | <ul style="list-style-type: none"> • Securely attached to the centre back of the cap • Positioned just above the braiding at the back |
| 5.10 Ring | <ul style="list-style-type: none"> • Securely attached to the centre back at the base of the cap |
| 5.11 Seams and stitching to BS 3870 | <ul style="list-style-type: none"> • Machine stitching is of stitch type 301, with at least 8 but no more than 10 stitches per 2cm and correctly tensioned • All hand stitching is to be neat and tidy and finish stitching is to lie flat against the lining • The brachering on the headleather is to comply with stitch type 304, to BS 3870 with at least 6 stitches per 2cm • Sewing threads may be treated with stain free lubricant • Shade of threads to match fabric of cap • All seams are to be free from pucker |

TABLE 6 – SCHEDULE OF NATO STOCK NUMBERS AND SIZES

| | |
|------------------|---------|
| 8405-99-500-7443 | Outsize |
|------------------|---------|

TABLE 7 – MEASUREMENTS AND TOLERANCES

- All measurements in centimetres unless otherwise stated.



| Size | Internal circumference of head band | Depth of side | | | Crown | |
|--|-------------------------------------|---------------|--------------|------------------------|-------|--------|
| | | Centre back | Centre front | 12cm from centre front | Width | Length |
| | | B | C | D | E | F |
| 57 | 57 | 5 | 13 | 15 | 12.5 | 25 |
| Tolerances +/- (mm) | 0 | 1 | 2 | 2 | 2 | 2 |
| These measurements are to be used to guide for all other sizes | | | | | | |

TABLE 9 – TEST REQUIREMENTS - FUR COLOUR FASTNESS

| Method of Test BS EN ISO 105 | | |
|------------------------------|---------------|----------|
| B02 | E01 | |
| Light (Xenon) | Water | |
| Rating | Colour change | Staining |
| 4-5 | 4-5 | 4 |

TABLE 10 - METHOD OF TEST

To determine fabric/lining laminate bond strength. The minimum bond strength of the laminated fabric is to be 1.25N/25mm when determined by the following method:

| | |
|--|---|
| 10.1 Sample preparation | <ul style="list-style-type: none"> Specimens which have been conditioned for 24 hours in the standard testing atmosphere defined in BS EN ISO 139 are to be cut 200mm x 25mm with at least two samples being cut with the 200mm dimension in the warp and weft direction respectively |
| 10.2 Procedure | <ul style="list-style-type: none"> The conditioned samples are to be delaminated by hand for 100mm The tails are to be clamped in the jaws of a CRE tensile testing machine The sample is then to be peeled apart with a jaw separation of 100mm/min for a 50mm length of sample |
| 10.3 Calculation and expression of results | <ul style="list-style-type: none"> The maximum value of peel bond strength is to be recorded for each sample that peels for 50mm The mean value of two results for samples, which delaminate for 50mm, is to be calculated in the warp and weft direction respectively |

4. LABELLING

Label is to be as follows:

- Clearly marked on a label to be sewn to the centre of the crown lining, or
- Clearly printed on a pressure sensitive self adhesive label to be adhered to the crown lining.

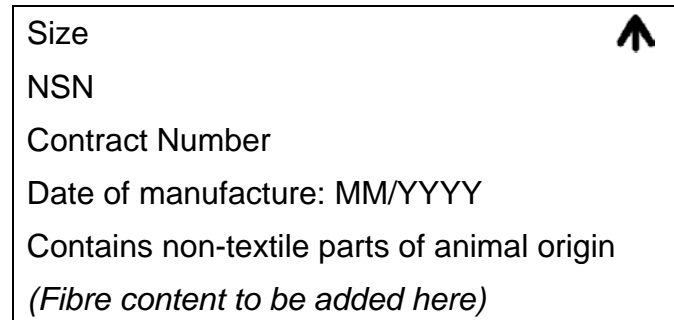


FIGURE 2. Identification and marking label

The size number is to be 1.2cm high and the remainder of the characters no less than 0.6cm high.