
Unisex (Dual purpose coats)

Reference no. 35/84220 AND 35162437 (TRAIN CREW)

1. Scope

This specification covers the materials of coats intended for personnel employed by Transnet Limited.

NOTES

1) The following requirements will be specified in tender invitations and in each order or contract:

- a) the outer material, if other than as specified (see note to 4.1) ; and
- b) the size designation(s) required (see 4.4).

2) Special conditions of tender (which cover the conditions of acceptance of the garments) are given in annex A.

2. Normative References

The following standards contain provisions, which through reference in this text constitute provisions of the specification. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this specification are encouraged to take steps to ensure the use of the most recent editions of the standards listed below. Information on currently valid national and international standards may be obtained from the South African Bureau of Standards.

CSS 286.21, *Clothing -- LAB/1: Labelling -- PAC/1: Packing and marking.*

SANS 79, *Textiles – Mass per unit area of conditioned fabrics*

SANS 105-BO2, *Tests for colour fastness – Part Bo2: Colour fastness to artificial light: Xenon artificial lamp test.*

SANS 1309, *Printed labels for textiles.*

SANS 1360-1, *Size designation of clothes -- Part 1: Women's and girls' outerwear garments.*

SANS 1362, *Sewing threads*

SANS 1387-7 *Woven cotton and similar apparel fabrics - Part 7: Jacket Linings*

Part 11 : Polyester and viscose raincoat fabric

SANS 1822, *Slide (zip) fasteners.*

SANS 5278 *Sewing stitches per unit length*

SANS 7211-2, *Textiles-Woven fabrics – Construction – Method of analysis Part 2: Determination of number of threads per unit area.*

SANS 10076-6, *The assessment of defects in textile piece-goods and made-up articles-Part 6: Defects in woven Filament piece-goods (synthetics)*

SANS 10076 - 7, *The assessment of defects in textile piece-goods and made-up articles-Part 7: Defects in household articles*

SANS 13934 –1, *Textiles-Tensile properties of fabrics. Part 1. Determination of maximum force and elongation at maximum force using the strip method s Part 1*

SANS 10101, *Standard nomenclature for stitches, seams, and stitchings.*

SANS 10188, *Standard methods of garment measurements..*

SANS 100004, *Terms and definitions for textiles and textiles merchandise.*

SANS 10011, *Care-labelling of textiles piece goods, textiles articles and clothing*

3. Definitions

For the purpose of this specification, the following definitions shall apply :

3.1 acceptable : Acceptable to Executive Manager,Transnet Limited.

3.2 nominal : Subject to the tolerances normal to good manufacturing practice.

4. Requirements

4.1 Materials

NOTE : Reference no. 35/84220 The colour will be an acceptable match to colour No. 2015c/1997 of CKS 129 “Navy” Reference no 35162437 (TRAIN CREW) Black

Cloth, Twill. Colour navy 65% Polyester / Viscose to SANS 1387-2 Type RPR 66 / Latest.

The quantity supplied will be in accordance with the material ratings agreed to for the fulfilment of the contract.

4.1.1 General

The materials specified in 4.1.2 to 4.1.11 (inclusive) all of a colour that is an acceptable match to that of the outer material, shall be supplied and used by the manufacturer.

4.1.2 Interlining

An acceptable fusible woven or non-woven interlining that complies with the requirements of CKS 627 for interlinings that are suitable for use in garments that will be dry-cleaned. The mass per unit area shall be such that the interlining is suitable for use in the forepart, collar, welts, cuff-tabs and the bottom of the sleeve. The selection of interlinings of appropriate type and mass per unit area shall be determined by consultation with the manufacturer(s) of the interlining(s).

4.1.3 Detachable warm lining, body and sleeve lining

A polyester lining that complies with the requirements for type L61P of SABS 1387 - 7.

4.1.4 Coated inner lining

The inner lining shall be coated fabric that complies with the requirements given in the table 1.(L61P of SANS 1387-7)

4.1.5 Wadding for detachable warm lining

A non-woven polyester fill of nominal mass per unit area 85 g/m² which has a finish on both sides to prevent fibre penetration.

4.1.6 Pocketing

An acceptable polyester-and-cotton pocketing.

4.1.7 Binding tape

An acceptable bias binding tape of nominal width 25 mm.

4.1.8 Buckles

Buckles shall be of steel, neatly covered with fabric, and shall have a centre prong and shall be capable of acceptable accommodating a belt of finished width 50 mm.

4.1.9 Buttons

Four-hole dope-dyed rimmed plastic buttons, of nominal diameter 26 mm. The colour shall be an acceptable match to that of the outer material. The backing buttons shall be four-hole plastic buttons of diameter 12 mm

4.1.10 Eyelets with washer

Acceptable black corrosion-resistant metal eyelets with washers, and having a nominal inside diameter of 4 mm.

4.1.11 Slide fastener

Detachable warm liner One-way open end slide fasteners with spiral elements that comply with the requirements of SANS 1822

Table 1 - Coated inner lining

1	2	3
Property	Requirements	SANS number
	Type	
	L61P	
Composition of base fabric .	100% Polyester	AATCC 20
Weave.....	Plain	Visual examination
Mass of coated fabric, (free from non-fibrous material). g/m ² ,min	70	79
Number of threads per cm ¹⁾ , min.		7211-2
Warp	39	
Weft ²⁾	22	
Breaking strength, N, min.		13934-1
Warp	550	
Weft	520	
Resistance to opening at seams ³⁾ , N .min	65	5726
Removable non-fibrous material content. % max.....	3	5966
Dimensional changes on: Dry cleaning, (warp & weft), %, max	2	
Laundering (warp & weft), % , max		960:Washing procedure A1
Press dry.....	2	Dry cleaning procedure E
Tumble dry.....	3	Dry cleaning procedure F
Colourfastness to :		
Washing, rating, min.....		11166: procedure C
Change in colour.....	4	
Staining of transfer cloths.....	3	
Dry cleaning, rating, min		105-D01
Change in colour.....	4	
Staining of transfer cloths.....	4	
Perspiration, rating, min		105-E04
Change in colour.....	4	
Staining of transfer cloths.....	3-4	
Light, rating, min.....	3	105-B02
1) Suitable yarn linear densities are given in annex B. 2) Subject to a tolerance – 10 % 3) Determined on the fabric as received, and also after dry cleaning in accordance with ISO 3175-2, also after washing in accordance with sans 96: procedure A1		

4.1.11 Threads

Threads shall comply with the relevant requirements of SABS 1362 and there shall be as follows :

- sewing threads : a polyester-and-cotton core-spun thread or a stable polyester thread, ticket No. 80 (in both cases).
- buttonhole thread : a mercerised cotton thread, ticket No. 36.
- buttonhole gimp: a glace cotton thread ticket No. 10.

4.2 Workmanship

The garments shall be cut and made with first-class workmanship throughout and shall be free from defects that affect their appearance or may affect their serviceability (or both), and from marks, spots and stains incurred in the making-up. All seams shall be smooth and all stitching uniform and free from twists, pleats and puckers and shall be sufficiently extensible to obviate seam cracking and undue shrinkage in use. All ends of sewing that are not secured in seams or other sewing shall be adequately back-tacked. All ends of sewing shall have been trimmed and loose threads removed. The garments shall be of uniform and acceptable make, colour and finish, and the matching of the shades of the component parts of a coat shall be such as to be acceptable.

4.3 Style

The dual purpose coat shall be double-breasted coat with a 3-button fastening, and with raglan sleeves (SEE Fig.1 and Fig.2) as specified. There shall be a seam and a vent at the centre back, a two-way storm collar, two welted side pockets with through opening, front and back laid-on shoulder yokes, a loose belt, a detachable lining. The body and sleeves shall be fully lined with body lining, and the body, sleeves and shoulder yokes shall be inner lined with a coated inner lining.

4.4 Sizes

The dual purpose coats shall be supplied in one or more of the size designations given in column 1 of table 2 as specified in the order or contract. Their measurements, determined in accordance with SABS 0188, and shall conform to the appropriate values given in table 2. The patterns shall conform to the specification and to the sealed sample and shall be drafted by the manufacturer.

Table 2 Size chart

1	2	3	4	5	6	7	8
Size designation 1)		Nominal finished garment measurements, cm					
Cm	inches	Chest	Back Length	Back width	Sleeve length 2)	Cuff circumference	Hem circumference
72	28	88	119	36	74	29	147
77	30	93	119	37	75	29	152
82	32	98	119	38	76	30	157
87	34	103	122	39	77	30	162
92	36	108	125	40	78	32	167
97	38	113	126	41	80	32	172
102	40	118	127	42	81	34	177
107	42	123	128	43	82	34	182
112	44	128	128	44	83	36	187
117	46	133	128	45	84	36	192
122	48	138	128	46	84	37	197
127	50	143	129	46	85	37	202
132	52	148	129	47	85	38	207
137	54	153	129	47	86	38	212
142	56	158	130	48	86	39	217
147	60	163	130	48	87	39	222
152	62	168	130	49	87	40	227
157	64	173	131	49	87	40	232
162	66	178	131	50	88	41	237
1) Based on the bust measurement of the intended wearer							
2) Measured from the center back to the end of the cuff							

1) The sealed sample is held by, and may be viewed at, the Transnet Freight rail Clothing Division.

4.5 Make

NOTE - Unless inconsistent with the text, all measurements are nominal.

4.5.1 Forepart

Each forepart (see figure 1) shall interlined with fusible interlining (4.1.2), fully interlined with coated interlining (4.1.4) and fully lined with rayon lining and shall have side pockets. The break of the lapel shall have a stay of a suitable fusible tape of width 25 mm. The finished width of a lapel from the point to the crease-line of the lapel shall be 13 cm.

4.1.2 Pockets

Each forepart shall have a semi-vertical welted side pocket (forming an angle of 20° with the vertical) of finishing length and with 16 cm and 50 mm respectively, and each pocket shall be stayed with an acceptable material. The welts shall be lined with outer-material and interlined with fusible interlining (see 4.1.2) and the welt shall be top-stitched 7 mm from the free edge on the pocket mouth. The ends of the welt shall be securely stitched down 1 mm and 7 mm from the free edge. The pocket bag shall be of pocketing (see 4.1.6) and shall be of finished width and depth 14 cm and 11 cm respectively (measured at the bottom of the pocket mouth) and the top of the pocket bag shall be stayed.

4.5.3 Back

The back (see figure 2) shall be plain.

4.5.4 Facings and linings

Each front shall have a facing of finished width 25mm at the neck shaped to 100 mm at the finished hem. One piecing of a facing shall be permitted provided that the join is between the bottom buttonhole and the hem of the coat. The seam joined the lining and inner to the facing shall be securely fastened. The inner lining shall extend to within 30mm of the button of the finished lining. The lining shall extend to within 25 mm of the bottom of the coat, shall have a hem bottom, and shall be attached, at each side seam, to the hem of the coat by means of length 60 mm off doubled rayon lining (see 4.1.2).

4.5.5 Cuff tabs

Each tab shall be of outer-material that is lined with self-material and interlined with fusible interlining (see 4.1.2). The cuff tab shall have a mitred end and the width measured at the base of the mitre and at the end of the tab shall be 60 mm and 40 mm respectively. The finished length of the tab shall be (measured from the raglan sleeve seam to the mitred end) 90 mm and its free edges shall be top-stitched 7 mm from its free edge. The cuff tabs shall be 60 mm above the cuff so positioned out of the outer sleeve seam that the mitred end faces the outside. Each cuff tab shall have 20 mm buttonhole so positioned with the eye of the buttonhole in line with the base of the mitre.

4.5.6 Ragan Sleeves

Raglan sleeves (see Fig. 1) shall be two-pieces raglan sleeves with a centre seam and an underarm seam, the underarm seam being a pressed open seam and the centre seam top-stitched. Each sleeve shall have a mitred tab of a double thickness of outer material sewn in with the underarm seam 60 mm from the lower edge of the sleeves. A finished tabs hall be 80 mm long, 40 mm wide at the underarm seam and 60 mm wide at the base of the mitre. A tab shall fasten to the sleeves with a buttonhole in the base of the nitre and a button at the corresponding position on the sleeves. In addition, there shall be a second button on the cuff 50 mm beyond the first button. The sleeves shall be fully lined with rayon lining (see 3.1.2) and inner lined with coated inner lining (see 3.1.6).

4.5.7 Collar

The collar shall be a two-way storm collar interlined with fusible interlining 9SEE 3.1.5). The under collar shall be of outer material and may have a center seam. The collar shall have a stand of with 40 mm and a fall of width 80 mm.

4.5.8 Shoulder straps only for ref 35162437

The shoulder straps shall be mitred straps, of outer fabric and lined with outer fabric of finished width 50 mm at the shoulder and tapering to 40 mm at the buttonhole end, and 14 cm long. The edges of the straps shall be top stitched 6 mm from the edge.

4.5.9 Belt

The belt shall be of doubled outer material, shall be interlined with fusible interlining (see 4.1.2), and shall a finished width 50 mm, an outer-material runner loop at one end and a mitred point at the outer. At the mitred end there shall be five eyelets with washers (see 4.1.10) spaced at 50 mm centres, the first eyelet being positioned 70 mm from the point. Then length of a finished belt (measured from the middle eyelet to the buckle) shall be equal to the circumference of the coat (when buttoned) at the waistline. The belt shall be stitched through the centre along its length.

4.5.10 Hanger

A hanger of folded outer material, or lining, of finished length 90 mm and width 10 mm, shall be securely attached to the collar stand at the centre back neck on the inside of each coat.

4.5.11 Detachable lining

The body of a coat shall have a detachable lining (see 4.1.5), of a knitted pile fabric (see 4.1.3), and the length such as to extend beyond the top of the vent, and that buttons to the inside of the body. On each front there shall be a pocket opening, of finished length 20 cm, that is inserted in apposition corresponding to that of the pocket opening in the forepart.

4.5.12 Buttonholes

- a) General. All buttons shall be neatly made, gimped and barred
- b) 30 mm long buttonholes. There shall be four 30 mm long buttonholes in the left forepart, i.e. one in the point of the lapel, and three near the front edge, the first being at the lapel, and three near the front edge, the first being at the lapel break the this third level with the lower end of the welt of the pocket, and the second midway between the other two. In the right forepart there shall be 30 mm long buttonholes, i.e. one in the point of lapel, and the other either at the lapel break or in a position corresponding to that of the second of the three buttonholes in the left-front, depending on the position of the jigger button (see 4.1.7).

One in each sleeve tab, one in the vent underlay and thirteen vertically inserted in the detachable lining i.e. three across the back of the neck and five in each front.

4.5.13 Buttons

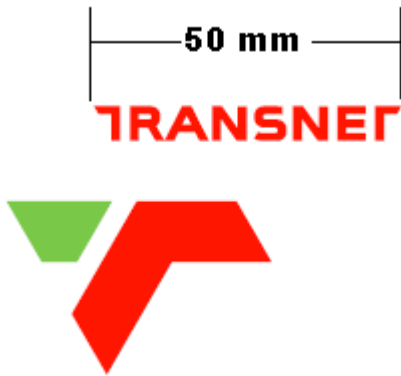
- a) Each forepart shall have three 25 mm buttons, the buttons on the right front in position that correspond to those of the three 30 mm long buttonholes in the left front, and the buttons on the left forepart horizontally aligned with those three buttonholes. The right front shall have, in addition, one 19 mm button at the gorge under the collar. The left forepart shall have, on the inside a 25mm jigger button either behind the button at the level of the lapel break, or behind the middle button. Each 25 mm button, other than that backed by the jigger button shall be reinforced on the inside by a backing button.
- b) There shall be twenty 14 mm buttons positioned as follows:
 - 1) One on each shoulder;
 - 2) Two on each cuff;
 - 3) One on the overlay of the vent: and

4.5.13 Logo

Transnet logo

For reference no. 35/84220 embroidered in white

For reference no. 35162437 (TRAIN CREW) Olive Green



4.5.14 Embroidery thread

The words TRAIN CREW to be embroidered with an acceptable 100% Viscose machine embroidery thread. Colour to be an acceptable match to Pantone colour no. 376 “Olive Green”

4.5.15 Edges

The front edges, lapels and the collar shall be top-stitched 9 mm from the free edge.

4.5.16 Hems

The bottom hem of the outer material shall be of finished depth 25 mm and the bottom of the lining shall be 25 mm. The two hems shall be attached on each side seam with a lining strap of finished width and length 25 mm and 60 mm respectively. The hems of the sleeves shall be finished depth 40 mm.

4.5.17 Loops

A loop of folded outer material of finished width 10 mm and of finished length 70 mm shall be positioned at the waistline on each side seam.

4.6 Stitches, seams and stitchings

4.6.1 General

All sewing shall be in accordance with SABS 0101.

4.6.2 Stitches

All stitches, stitch type 301.

4.6.3 Seams

Seams shall be as follows :

- a) front edge, collar and cuff tabs: seam type Sse-2;
- c) side and sleeve seams: seam type Ssa-1 and pressed open;
- c) bias-binding for warm lining: seam type Bsc-1/ and
- d) all other seams: seam type SSa-1.

4.6.4. Stitchings

The stitching shall be as follows :

- a) set in seam of welt: stitching type Ssq; and
- b) bottoms hem of outer material and lining : stitching type EFb-1.

4.6.5 Number of stitches

The number of stitches shall be as follows :

- a) all main seaming and top-stitched : 40 ± 4 per 10 cm;
- b) buttonholes : 12 ± 1 per cm; and
- c) bar tacks : 20 ± 2 per cm.
- d) buttons : 16 ± 1 per button;

5 Labelling, packing and marking

5.1 Labelling

As specified in CSS 286.21 lab/1.

5.2 Packing and marking

As specified in CSS 286.21 PAC/1.

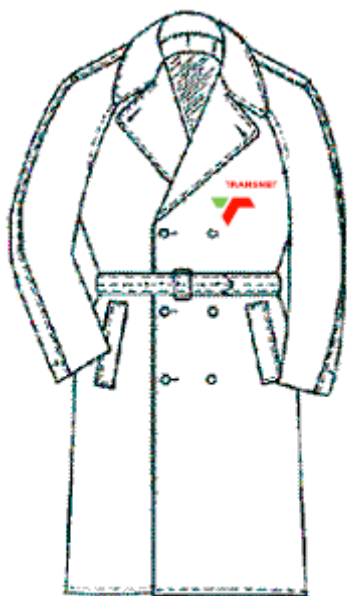


Figure 1 - Front Raglan Sleeve

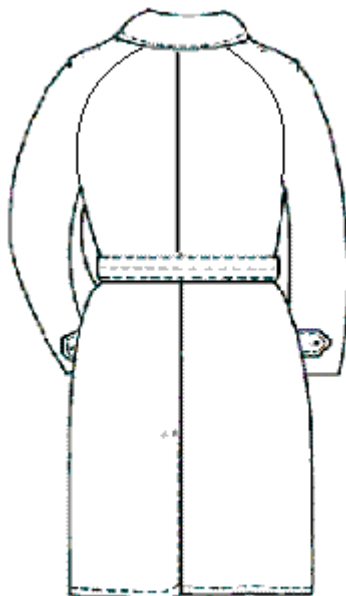


Figure 2 - Back Raglan Sleeve

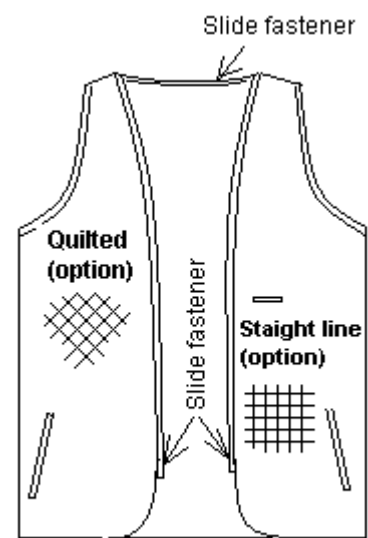


Figure 3 - Detachable warm lining

Annex A
(Normative)

Special conditions of tender

A-1 Unless otherwise stated, Transnet Limited (or an officer or organization deputed by it), shall be the inspecting authority.

A-2 Three pre-production sample Dual Purpose Coats shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced, and it shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples.

A-3 The Dual Purpose Coats shall be subject to inspection during the course of manufacture. The inspector shall, during normal working hours, be given all reasonable facilities for carrying out his duties and shall have the right of entry into the contractor's factory and the factory or works of any subcontractor where work on Dual Purpose Coats supplied to this specification may be in progress.

A-4 The contractor shall inspect the finished Dual Purpose Coats for compliance with the specification before submitting them to the inspecting authority for final inspection.

A-5 Before acceptance, the Dual Purpose Coats shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.

REVISION HISTORY SHEET		
Document Quality Assurance		Document No.
Subject ADMINISTRATION, PREPARATION, MAINTENANCE AND DISTRIBUTION OF PRIVATE SPECIFICATIONS		Effective date 26 October. 2005
Controlling Officer: R. Steynberg		
Approving Officer: C. du Plooy		
Rev/No.	Date approved	Nature of revision
1	October 2005	1) Adopted item reference 35/84369 and removed reference 35/123306 2) 4.4) Insert revised size chart 3) 4.5.10) Detachable warm liner, Change “button on” to slide fastener 4) 4.3) Style and 4.5.6 Shoulder straps – Remove shoulder straps 5) Insert sketches on page 7
2)	November 2010	1) Adoption of CKS 310 as it has been archived. 2) Add logo to specification
3)	June 2012	1) Inclusion of ref 35162437. 2) Change logo format 3) Shoulder strap included only for ref 35162437
4)	July 2016	1) Replace colour 507c with 2015c of CKS 129 in clause 4.1