SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 323310/2024

SOUTH AFRICAN POLICE SERVICE

BODY ARMOUR MALE BEIGE & CONSEALED BULLET RESISTANT VEST

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 323310/2024

SCOPE OF THE REQUIREMENT

The South African Police Service (SAPS) requires a complete body armour and/or spare parts for a male bullet resistant vest beige colour and a concealed vest, for operational purposes.

IMPORTANT NOTICE TO BIDDERS!

- Attention is drawn to the detailed specification technical requirements herein.
- The SAPS requires that all columns in the specification document must be completed. If a specific column cannot be completed, a detailed explanation must be provided. The SAPS then use discretion to either accept or reject the explanation or deviation.
- No materials shall be supplied by the SAPS, accept the camouflage material.
- Illustrations/drawings in the specification are not scaled and are for guidance only.
- The successful bidder to supply a set of complete patterns to the SAPS of all parts and sizes.
- The SAPS takes no responsibility whatsoever for the violation of any patent rights.
- Attention is drawn to the possible requirement of an identification type and/or method of labelling in or onto the end-product or any part of the product as requested in the specification.
- The specification includes normative references to guide the product quality standards to which the product must adhere, and it refers to the latest edition of each standard as far as possible. The bidder is strongly encouraged to take steps to ensure the use and standards of the most recent editions of the norms and standards documents referred to in the specification.
- Indicate only Comply or Not comply in the "State:" box. No "X" or "√" indications shall be allowed.

NO	DESCRIPTION	OFFER: PLEASE ONLY STATE: COMPLY OR NOT COMPLY BELOW
	BODY ARMOUR MALE BULLET RESISTANT VEST REQREMENTS	
1.	**SCOPE**	
	✓ This specification covers the material, cut and make of body armour (bullet resistant vests) intended to be worn over the male wearer's clothing/uniform. ✓ The concealed body armour (bullet resistant vests) intended to be worn underneath the wearer's clothing for male personnel of the South African Police Service. ✓ The bullet resistant vests shall be supplied in variations as given below:	
1.1	SAPS beige colour standard bullet proof vest.	State:
1.2	SAPS concealed standard bullet proof vest.	State:
2.	**BULLET PROOF VEST COMPONENTS & ACCESSORIES (PARTS)**	
2.1.	**Each complete beige body armour, when ensemble, shall consist of eight (8) individual items:** ➢ Separate front panel, to be fitted with: ✓ A hard armour plate pocket. ✓ Female touch and close fastener sections. ✓ Inner soft ballistic textile unit pouch. ➢ Separate back panel to be fitted with: ✓ A hard armour plate pocket. ✓ A patch pocket on the inside of the back (user's manual pocket) ✓ Attachment straps at the sides that fastens with touch and close fastener. ✓ Inner soft ballistic textile unit pouch. ✓ Padded attachment straps at the shoulders that fastens with touch and close fastener.	State:

	✓ Ballistic plate, front, removable, to fit in the front and back panel ballistic plate pockets. ✓ Ballistic plate, back, removable, to fit in the front and back panel ballistic plate pockets. ✓ Separate front soft ballistic body armour inner pack. ✓ Separate back/rear soft ballistic body armour inner pack. ✓ Carry bag for storage purposes. ✓ User and maintenance manual of laminated printed board.	
2.2.	**Each complete concealed body armour, when ensemble, shall consist of six (6) individual items:** ➢ Separate front and back panel. ➢ Front panel to be fitted with: • Female touch and close fastener sections. • Inner soft ballistic textile unit pouch. ➢ Back panel to be fitted with: • Attachment straps at the sides that fastens with touch and close fastener. • Inner soft ballistic textile unit pouch. • Padded attachment straps at the shoulders that fastens with touch and close fastener. ➢ Removable inner soft ballistic textile units (front and rear panel): • Soft ballistic textile panels enclosed in a PVC casing high-frequency sealed edges. • Markings to be colour coded according to the size.	State:
3.	**COMPONENT MATERIALS**	
3.1.	**Outer vest material**	
3.1.1.a	**Beige vest:** An acceptable double yarn polyester-cotton fabric that complies with the requirements for type PC74M of SANS 1387-2 “Woven cotton and similar apparel fabrics. Part 2: Polyester-and-cotton work wear fabrics” with the following indications: ✓ Fibre composition**:** 50% Polyester/50% Cotton. ✓ Colour fastness rating to: ➢ Washing - staining of transfer cloths: 4 ➢ Perspiration - staining of transfer cloths: 4 ➢ Light: 5	State:
3.1.1.b	**Concealed vest:** ➢ Comply with the requirements as specified in table 17. ➢ Fabric to have wicking properties. Colour to be a match, in terms of SANS 10076-6 “The assessment of defects in textile piece-goods and made-up articles Part 6: Defects in woven filament piece-goods”, to colour No. 1c-2005 “White” of CKS 129 “Colours for textiles”. Refers to the “Outer material requirement” table for the concealed vest.	State:
3.1.2.	Colour to be a match, in terms of SANS 10076-1 “The assessment of defects in textile piece-goods and made-up articles. Part 1: Defects in woven piece-goods (cellulosic and cellulosic blends)”, to the following CKS 129 colours as given in table 1 (as specified in the order and contract):	State:
3.1.3.	**Table 1 – CKS 129 Colours**	

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 323310/2024

	Colour option	**Colour Number**	**Title**	
	1	395c-05	SAPS Beige	State:
	2		SAPS	State:
3.2.	**Slide fasteners**			
3.2.1.	One-way closed-end that complies with the requirements for type 5 Class C of SANS 1822 “Slidefasteners”.			State:
	Normal design (see 4.2 (a) (1) of SANS 1822)			State:
	Synthetic spiral (nylon).			State:
	Colour to be an acceptable match to the colour of the outer material.			State:
3.3.	**Touch and close fasteners**			
3.3.1.	To comply with the requirements of SANS 1823 "Touch and close fasteners" of finished widths: 25 mm and 50 mm.			State:
	Colour to be an acceptable match to the colour of the outer material.			State:
3.4.	**Webbing**			
3.4.1.	Shall be an acceptable 9 bar polyester webbing.			State:
	Shall be heat sealed at the ends to prevent fraying.			State:
	Shall comply with the requirements as given in table 2.			State:
	Colour to be an acceptable match to the colour of the outer material.			State:
3.5.	**Foam inserts**			
3.5.1.	Acceptable closed cell, cross linked polyethylene (SPX33) foam.			State:
	Of nominal density 33 kg/m³ ± 6 kg/m³.			State:
	Of minimum thickness 10 mm.			State:
3.6.	**Tape**			
3.6.1.	To be an acceptable polyester herringbone tape of nominal width 25 mm.			State:
	Cut edges to be heat-sealed to prevent fraying.			State:
	Colour to be black.			State:
3.7.	**Threads**			
3.7.1.	To comply with relevant requirements of SANS 1362 “Sewing threads”.			State:
	Colour to be an acceptable match to the colour with which it is used.			State:
	Staple polyester.			State:
	Ticket No 60 or 80.			State:
3.8.	**Body lining** (Concealed vest)			
3.8.1.	To be an acceptable soft air mesh/airtex material.			State:
3.8.2.	To comply with the requirements as given in table 2.			State:
3.8.3.	Colour to be an acceptable match to the colour of the outer material.			State:
4.	**SOFT BALLISTIC TEXTILE MATERIAL**			
4.1.	**Soft ballistic panel cover requirements**			

4.1.1.	Removable inner soft ballistic textile units (front and rear panel).	State:
	Soft ballistic textile panels to be securely enclosed in a high quality PVC outer casing.	State:
	High-frequency sealed edges.	State:
	Shall be an acceptable opaque monomerically plasticized white PVC foil of thickness 0,1 mm – 0,245 mm.	State:
	Such that it can be high frequency heat sealed.	State:
	To be such that the markings on the soft ballistic panels shall be clearly visible after it has been encased in this material.	State:
	To be such that it can be printed (such that markings shall outlast the vest).	State:
	To prevent moisture absorption and shall be water resistant.	State:
	Markings to be colour coded according to the size.	State:
	Markings on plastic encasing material shall be as given in 13.3.2.	State:
4.2.a.	**Soft ballistic textile material requirements (Beige vest)**	
4.2.a.1.	A complete soft ballistic panel shall consist of a minimum of 21 layers of the same ballistic material of the same manufacturer. No mix material composition shall be allowed to make up a ballistic textile panel.	State:
	Shall be made of a high-tenacity ballistic microfilament yarn.	State:
	Of mass 280 g/m² microfilament when tested in accordance with SANS 79 “Textiles - Mass per unit area of conditioned fabrics”	State:
	Shall either be Kevlar® or Twaron® or equivalent with the same or better standards protection capabilities.	State:
	Shall be procedurally correctly treated, according to the manufacturer standards, to consist of limit moisture absorption. Spray rating of 4 minimum when tested in accordance with SANS 5300 “Water repellency of textile fabrics (Spray test)”	State:
	Required identification and tracking markings on each and every soft ballistic textile layers shall be as given in the specification.	State:
	Markings to be added with a type of ink that is not damaging the yarn or influencing the ballistic performance of the yarn	State:
4.2.b.	**Soft ballistic textile material requirements (Concealed vest)**	
4.2.b.1.	IMPORTANT NOTE: A minimum of 28 layers shall be required for each soft ballistic unit.	State:
	Of mass 200 g/m² when tested in accordance with SANS 79 “Textiles - Mass per unit area of conditioned fabrics” for the concealed vest.	State:
	Shall either be Kevlar® or Twaron® or any other type of textile ballistic material with the similar or better ballistic performance and standards.	State:
	Shall be treated to limit moisture absorption.	State:
	Spray rating of 4 minimum when tested in accordance with SANS 5300 “Water repellency of textile fabrics (Spray test)”.	State:
	Markings on the soft ballistic textile layers shall be as given in specification.	State:
4.3.	**Sewing thread**	
	To be a 100% Aramid thread.	State:
	Ticket number to be such that it shall be fit for purpose and thick enough to accommodate the fabric with which it is used.	State:
5.	**Hard armour plates requirements**	

5.1.	An acceptable composite ceramic/aramid plate.	State:
	Only virgin raw material shall be permitted to be used in the manufacture of the plates.	State:
	The performance characteristics shall be as given in section 9.	State:
	Shall comply with the values given in table 3.	State:
	Each plate shall be completely covered with fabric.	State:
	Fabric to comply with the performance requirements as specified for type C290 of SANS 1585, with the following deviations.	State:
	Single acrylic coat with surface treatment that will enhance adhesion, but excludes water head coatings.	State:
	Fabric to be laminated to the tile in such a way that the bonding shall be uniform with no untreated areas, ripples or bubbles present.	State:
	Finish on fabric to be such that it shall allow printing (such that makings shall outlast vest).	State:
	Fabric to be such that the edges and joins can be heat sealed to such an extent that the sealed areas shall never part.	State:
	Colour of fabric to be black.	State:
	Shape and dimensions to comply with the design as given in Annex H.	State:
	Markings on hard armour plates shall be as given in 13.2.	State:
6.	**Carry bag requirements**	
6.1.	**Outer material**	
6.1.1.	To comply with the requirements as given in table 4.	State:
	Colour to be black.	State:
6.2.	**Edge binding**	
6.2.1.	To be an acceptable polyester herringbone tape of nominal width 25 mm.	State:
	Cut edges to be heat-sealed to prevent fraying.	State:
	Colours shall be applied as per size requirement and as given in table 5.	State:
6.3.	**Carry bag handle webbing**	
6.3.1.	Shall be an acceptable polyester webbing.	State:
	Shall be heat sealed at the ends to prevent fraying.	State:
	Shall comply with the requirements as specified in table 6.	State:
	Colour to be black.	State:
6.4.	**Carry bag slide fasteners**	
6.4.1.	One-way closed-end that complies with the requirements for type 5 Class C of SANS 1822 “Slidefasteners”.	State:
	Normal design (see 4.2 (a) (1) of SANS 1822).	State:
	Synthetic spiral (nylon).	State:
	Colour to be black.	State:
6.5.	**Touch and close fasteners**	
6.5.1.	To comply with the requirements of SANS 1823 "Touch and close fasteners".	State:

	Of finished width 25 mm.	State:
	Colour to be an acceptable match to the colour of the outer material with which it is used.	State:
6.6.	**Threads**	
6.6.1.	To comply with relevant requirements of SANS 1362 “Sewing threads” Colour to be an acceptable match to the colour with which it is used. Staple polyester. Ticket No 60 or 80.	State:
7.	**Operating manual material requirements**	
7.1.	160g – 200 g Paperboard. Dimensions to be 12.7 cm x 22 cm (before folding).	State:
8.	**WORKMANSHIP**	
8.1.	**The body armour shall be:** ✓ Cut and made with first-class workmanship throughout. ✓ Of uniform and acceptable make, colour and finish.	State:
8.2.	**Shall be free from:** ✓ Defects that affect their appearance or may affect their serviceability (or both). ✓ Marks. ✓ Spots. ✓ Stains, incurred in the making-up.	State:
8.3.	**Seams and stitches shall be:** ✓ Smooth and uniform. ✓ Free from twists, pleats and puckers. ✓ Sufficiently extensible to avoid seam cracking and undue shrinkage in use.	State:
8.4.	**Ends of sewing shall be:** ✓ Trimmed and loose threads removed. ✓ Back-tacked if unsecured.	State:
8.5.	**Laminated hard ballistic plates shall have:** ✓ No burrs, sharp edges, air holes, bubbles. ✓ No poor finishing of lamination and bonding to the base plate.	State:
8.6.	**Plastic casing shall:** ✓ Have no air holes around the sealed edge. ✓ Be uniform at the high frequency sealed edge. ✓ Be sealed securely to avoid the seam from opening during use.	State:
9.	**PERFORMANCE REQUIREMENTS OF THE BODY ARMOUR**	
9.1.	**General**	
9.1.1.	✓ If the correct size designation has been selected, the beige body armour will be of an acceptable fitwhen worn over a garment. ✓ If the correct size designation has been selected, the concealed body armour will be of an acceptable fitwhen under a garment. ✓ The garment shall give the necessary protection for the wearer in the upper torso area. ✓ The garment shall give the wearer protection against handguns as per paragraph 9.3.1 withouthard armour plates. ✓ The garment shall also be able to accommodate the necessary hard armour plates, providing thewearer with a higher level of protection as per paragraph 9.3.2. ✓ The garments shall be so constructed that the soft ballistic units and hard	State:

	armour plates can beremoved from the outer garment (to enable washing of outer garment). ✓ The casing of the ballistic soft panels shall prevent moisture absorption and shall be highfrequency sealed that shall not part during the fitment or removal process. ✓ Shall display none of the defect as specified in table 18.	
9.2	**Determination of the correct size when manufactured:**	
	PLEASE NOTE! Trim charts of all parts, according to precise scales, shall also be submitted by the successful manufacturer (see Annex I). ✓ Place outer garment on the pattern. ✓ It shall conform to the pattern in all aspects, with a seam allowance of not more than **20 mm.** ✓ The soft ballistic panels shall be the exact size of the patterns and shall fit tightly into the outers. ✓ These interfaces shall be managed/confirmed during the pre-production sample phase.	State:
9.3	**Qualification testing requirements by the successful bidder:**	
9.3.1.	✓ Any of the calibers specified in 9.3.1 and 9.3.2 may be used for the qualification testing, but theSAPS reserves the right to choose the caliber. ✓ The contractor shall be responsible for obtaining the weapons and ammunition for the necessary testing as given in 9.3.1 and 9.3.2. ✓ The ballistic testing shall be performed in an approved indoor test facility which is fully equipped with all required and calibrated equipment and has been approved by the inspection authority to perform ballistic testson body armour. ✓ Should the testing facility be approved by the inspecting authority, it will only be valid for periodof one year and will have to be re-assessed every year.	State:
9.3.1.1.	**When the beige and concealed garment is used <u>only with the soft ballistic</u> units inserted:**	
	Shall give protection against: – .357 Magnum JSP 158 grains at 436 m/s ± 9 m/s to level II test procedures specified inSANS 1658:2007. – 9 mm Par. FMJRN 124 grains at 367 m/s ± 9 m/s to level II test procedures specified inSANS 1658:2007. – and all lesser threats.	State:
9.3.1.2.	**When the garment is used <u>with the hard armour plates</u> in conjunction withthe soft ballistic panels (excluding concealed vests):**	
	Shall give a higher level of protection against: – 7,62 x 51 NATO Ball lead core (copper jacket) 148 grains at 847 m/s ± 9 m/s or 7,62 x 51 NATO Ball lead core (copper jacket) 143 grains at 862 m/s ± 9 m/s to level III test procedures specified in SANS 1658:2007. – 5,56 x 45 NATO Ball lead core 55 grains at 955 ± 9 m/s to level III test procedures specified in SANS 1658:2007. – 7,62 x 39 (mild steel core) (AK 47) 123 grains at 710 ± 9 m/s to level III test procedures specified in SANS 1658:2007. – 7,62 x 39 API 120 grains (AK 47) at 725 ± 9 m/s to level III test procedures specified in SANS 1658:2007 – and all lesser threats.	State:
9.3.1.3.	**Multi-shot requirements of the hard armour plates**	
	✓ Capable of stopping five direct shots in accordance with the specified	State:

ORIGINAL

	requirements as given in Annex E, provided that shots do not superimpose on previous shots and are fair shots. ✓ The shots will be as follows. ✓ The first shot shall be either 7,62 x 39 API or 7,62 x 51 mm NATO Ball. ✓ Followed by four shots 7,62 x 39 Ball or 5,56 x 45 Ball.	
9.3.1.4	**Back face deformation**	
	✓ The back face deformation as measured in the plasticine backing material may not exceed the following values: – 44 mm on any shot 1 on any panel or plate. – 44 mm on shots 2 – 5 on the hard armour plate.	State:
10.	**MAKE**	
	✓ Illustrations are not to scale and are for guidance only, and unless inconsistent with the text, all measurements are nominal. The front and back dimensions shall be as given in table 7(c). A tolerance of ± 10 mm will be allowed, except on measurements where deviating to the smaller side will prevent proper fitment of components eg. hard armour plate patch pocket. ✓ All cut edges of all textile panels shall be overlocked prior to assembly.	State:
10.1	**Outer jacket requirements**	
	✓ Each outer jacket shall consist of: – A front panel (see 10.1.2). – A back panel (see 10.1.3). – The front and back panel shall be detachable. – The front and back panels shall attach at the shoulder and sides. – Front and back panels to be edge-stitched 2 mm along all edges.	
10.1.2	**Front panel requirements**	
10.1.2.1	✓ Each front shall: – Made of outer material. – Be lined with outer material. ✓ The face side shall be fitted with the following: – A hard ballistic plate patch pocket (see 10.1.2.2) – A vertically positioned female section of touch and close fastener – In a corresponding position to the male section on the flap of the hard ballistic plate patch pocke (when the pocket flap in folded inwards) – Two slanted female sections of touch and close fastener at the shoulder position ✓ To be in corresponding positions to the male sections on the shoulder straps of the back panel. ✓ Length to be in accordance with the patterns. ✓ Positioned in accordance with the patterns. ✓ Attached by means of a 2 mm edge-stitching along all outer edges. ✓ Two horizontal female sections of touch and close fastener. ✓ Positioned centrally in the front as to correspond to the male section on the torso straps. ✓ To be positioned parallel to each other.	
10.1.2.2	**Front hard armour plate patch pocket**	
	Be made of doubled outer material.	
	The double layered fabric shall be seamed/closed along all edges.	State:
	The one side edge that shall serve as the mouth opening shall be cut with a step.	State:
	The step shall serve as a pocket flap.	State:

	The step shall be of finished width 50 mm and finished length 28 cm.	State:
	The step/pocket flap shall be fitted with a length of male touch and close fastener.	State:
	Touch and close fastener to be of finished length 23 cm and centred in the mouth opening.	State:
	Touch and close fastener to be of finished width 50 mm.	State:
	Attached to the step/pocket flap with a 2 mm edge-stitching along all edges.	State:
	The step/pocket flap shall be folded to the inside and the complete mouth opening shall be edge-stitched 2 mm and 8 mm.	State:
	The touch and close fastener shall be positioned flush with the folded over step.	State:
	The boxed rectangle (pocket) shall be folded over 50 mm along the bottom edge, correctly positioned on the front panel and attached to the front by means of 2 mm and 8 mm edge- stitching along all edges, except the edge that shall server as mouth opening.	State:
	The inner edge of the 50 mm fold- over (at bottom) shall also be attached to the front by means of a 2 mm and 8 mm edge-stitching.	State:
	Be such that behind the pocket, an additional layer of outer material shall be positioned on the inside (see figure 6)	State:
	The outer edges of the inside layer shall be overlocked.	State:
	In addition to the inside layer, a length of tape (see 6.1.6) shall be sandwiched between the inside layer and the body of the front along all four sides	State:
	All inner components (inside layer of outer material and tape) shall all be attached together with the outer patch pocket edge-stitching.	State:
	Dimensions of layer to comply with the dimensions of the pocket (plus seam allowance).	State:
	Be positioned centrally in the width of the front panel.	State:
	Be of finished width 26 cm (refer to patterns).	State:
	Be of finished depth 34 cm (refer to patterns).	State:
	Be positioned in length as given in table 8.	State:
	Be such that the pocket mouth opening shall be positioned on the left (refers to as when worn).	State:
	Inside of pocket mouth to be fitted with a vertically positioned length of female touch and close fastener of finished length 23 cm.	State:
	The one side edge of the touch and close fastener shall flush with the pocket mouth opening.	State:
	In corresponding position to the touch and close fastener on folded-in pocket flap	State:
	To be printed (applicable to both types/colours of bullet resistant vests).	State:
	The word “POLICE” in capital letters.	State:
	To be printed with a non-reflective white colour.	State:
	Printing to be such that it shall outlast the jacket.	State:
	Edges of printing shall be sharp and base fabric colour shall never show through.	State:
	Nominal letter height to be 75 mm.	State:
	Nominal finished length of word to be 20 cm.	State:
	Centrally positioned in the width and length of the pocket.	State:

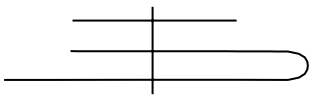
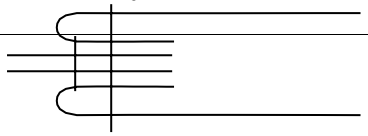
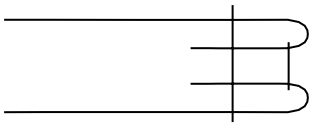
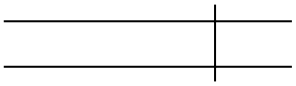
10.1.2.3	**Front lining**	
	Be of outer material.	State:
	Be cut in two sections, i.e. a top section and a bottom section.	State:
	Top section	
	Have a 25 mm cut-on flap that shall extend along the full width of the front panel	State:
	Fitted with a stringer of slide fastener that shall extend along the full width of the mouth opening	State:
	Each side edge shall be reinforced with a vertical stitching as well as a bar-tack that shall extend along the full depth of the concealing flap, 25 mm from the side	State:
	fitted with a label that complies with the requirements as given in paragraph 13.1 that shall be centered in the width of the front lining panel	State:
	Bottom section	
	Fitted with the other stringer of a slide fastener.	State:
10.1.3	**Back panel**	
	Made of outer material.	State:
	Be lined with outer material.	State:
	The back shall be fitted with the following:	
	A hard ballistic plate patch pocket (see 10.1.3.2).	State:
	Two shoulder fastening straps.	State:
	Four torso fastening straps (two on each side).	State:
10.1.3.2	**Back hard armour plate patch pocket**	
	Be made of doubled outer material.	State:
	The double layered fabric shall be seamed/closed along all edges.	State:
	The one side edge that shall serve as the mouth opening shall be cut with a step.	State:
	The step shall serve as a pocket flap.	State:
	The step shall be of finished width 50 mm and finished length 28 cm.	State:
	The step/pocket flap shall be fitted with a length of male touch and close fastener.	State:
	Touch and close fastener to be of finished length 23 cm and centered in the pocket mouth opening.	State:
	Touch and close fastener to be of finished width 50 mm.	State:
	Attached to the step/pocket flap with a 2 mm edge-stitching along all edges.	State:
	The step/pocket flap shall be folded to the inside and the complete mouth opening shall be edge-stitched 2 mm and 8 mm.	State:
	The touch and close fastener shall be positioned flush with the folded over step.	State:
	The boxed rectangle (pocket) shall be folded over 50 mm along the bottom edge, correctly positioned on the back panel and attached to the front by means of 2 mm and 8 mm edge- stitching along all edges, except the edge that shall server as mouth opening.	State:
	The inner edge of the 50 mm fold- over (at bottom) shall also be attached to the front by means of a 2 mm and 8 mm edge-stitching.	State:

	Be such that behind the pocket, an additional layer of outer material shall be positioned on the inside (see figure 9).	State:
	The outer edges of the inside layer shall be overlocked.	State:
	In addition to the inside layer, a length of tape (see 6.1.6) shall be sandwiched between the inside layer and the body of the front along all four sides.	State:
	All inner components (inside layer of outer material and tape) shall all be attached together with the outer patch pocket edge-stichings.	State:
	Dimensions of layer to comply with the dimensions of the pocket (plus seam allowance).	State:
	Be positioned centrally in the width of the front panel.	State:
	Be of finished width 26 cm (refer to patterns).	State:
	Be of finished depth 34 cm (refer to patterns).	State:
	Be positioned 25 mm below the centre back neck point.	State:
	Be such that the pocket mouth opening shall be positioned on the left (refers to as when worn).	State:
	Inside of pocket mouth to be fitted with a vertically positioned length of female touch and close fastener of finished length 23 cm.	State:
	The one side edge of the touch and close fastener shall flush with the pocket mouth opening.	State:
	In corresponding position to the touch and close fastener on folded-in pocket flap.	State:
	To be printed (applicable to both types/colours of bullet resistant vests)	State:
	The word “POLICE” in capital letters.	State:
	Colour to be white.	State:
	Printing to be such that it shall outlast the jacket.	State:
	Edges of printing shall be sharp and base fabric colour shall never show through	State:
	Nominal letter height to be 75 mm.	State:
	Nominal finished length of word to be 20 cm.	State:
	Centrally positioned in the width and length of the pocket.	State:
10.1.3.3	**Back lining**	
	Be of outer material	State:
	Be cut in two sections, i.e. a top section and a bottom section	State:
	Top section	
	Have a 25 mm cut-on flap that shall extend along the full width of the back panel.	State:
	Each side edge shall be reinforced with a vertical stitching as well as a bar-tack that shall extend along the full depth of the concealing flap, 25 mm from the side.	State:
	Fitted with a stringer of slide fastener that shall extend along the full width of the mouth opening.	State:
	Upper back lining section to be faced with a layer of outer material, forming a flap at the shoulder area (see figure 12).	State:
	Properly finished.	State:
	Securely tacked at armhole point.	State:
	Fitted with a patch pocket.	State:

	Pocket to be of nominal finished depth 17 cm and finished width 10 cm.	State:
	Side and bottom edges to be folded in and attached with a 2 mm edge-stitching.	State:
	Pocket mouth hem to fasten with centrally positioned patches of touch and close fastener of width 25 mm and length 45 mm.	State:
	Touch and close fastener to be attached by means of 2 mm edge-stitching along all edges.	State:
	Centred in the width of the back panel and positioned with top edge 13 cm below the neck.	State:
	Fitted with a label that complies with the requirements as given in paragraph 13.1 that shall be centered in the width of the pocket.	State:
	Bottom section	
	Fitted with the other stringer of a slide fastener.	State:
10.1.3.4	**Shoulder straps**	
	Be of outer material, lined with outer material.	State:
	Attached at each back shoulder.	State:
	Of finished length 270 mm for all sizes.	State:
	Be shaped in accordance with the patterns and shall have a wide and narrow end.	State:
	Interlined with a length of webbing of length 270 mm.	State:
	Narrow end to be:	
	Of nominal finished width of 50 mm.	State:
	Of nominal finished length of 100 mm.	State:
	Fitted to the underside with a length of male touch and close fastener.	State:
	Attached through all layers with a 3 mm edge-stitching as well as a box-stitched along full length of the fastener.	State:
	Touch and close fastener to be of nominal cut length 110 mm.	State:
	Front edge of fastener to be positioned at the front edge of the strap.	State:
	Wide end to be:	
	Of nominal finished width of 60 mm.	State:
	Of nominal finished length of 170 mm.	State:
	Interlined with a layer of foam.	State:
	Be horizontally bar-tacked at each end at the shoulder joining seam.	State:
10.1.3.5	**Torso straps shall:**	
	Be two separate straps attached at each side seam (four straps in total).	State:
	Finished length to be as given in table 9.	State:
	Of finished width 50 mm.	State:
	Be of webbing and fully covered of outer material, in such a way that the seam of the outer material cover shall be centrally positioned on the underside.	State:
	Each be fitted with a male section of touch and close fastener.	State:
	Attached through all layers with a 3 mm edge-stitching as well as a box-stitched along full length of the fastener.	State:

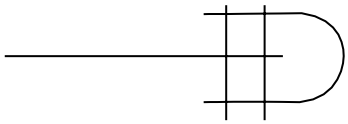
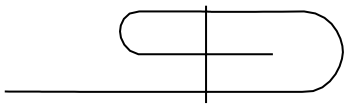
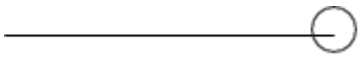
	Touch and close fastener to be of nominal cut length 110mm.	State:
	Front edge of fastener to be positioned at the front edge of the strap.	State:
	Be vertically bar-tacked at each end of the strap at the side seam joining seam.	State:
	Be positioned and attached in such a way that the straps shall correspond with the touch and close fasteners on the front.	State:
10.2.	**Soft ballistic units**	State:
	Each beige vest unit shall consist of a minimum of 21 layers **of the same soft ballistic textile material** (see 6.2.1), which shall be completely encased in plastic encasing material (see 6.2.2).	State:
	Each concealed vest unit shall consist of a minimum of 28 layers **of the same soft ballistic textile material** (see 6.2.1) which shall be completely encased in plastic encasing material (see 6.2.2)	State:
	Outer edges of encasing material to be high frequency heat sealed in such a way that:	
	The sealed edges shall not part during fitment and removal of units.	State:
	It shall prevent moisture absorption and shall be water resistant at all times.	State:
10.3	**CARRY BAG**	
10.3.1	**Outside design of carry bag shall:**	
	Be of carry bag material (see 6.4.1).	State:
	Be rectangular.	State:
	Be a continuous length that shall be double folded.	State:
	Be fitted with a slide fastener along the top length of the bag.	State:
	Be of dimensions as given in table 10.	State:
	Be folded over at the top creating a cut-on flap to conceal the slide fastener.	State:
	Of finished depth in accordance with patterns.	State:
	Vertically bar-tacked at both sides of the mouth end, on top of the binding tape.	State:
	Slide fastener to extend along the full length of the mouth opening.	State:
	Be bound at the side edges with tape (6.4.2).	State:
	Ends to be heat sealed.	State:
	Shall be of appropriate colour for the specified size as given in table 5.	State:
	Have a handle of carry bag webbing (see 6.4.3).	State:
	Each strap shall be a continuous length of webbing.	State:
	Cut edges to be properly heat-sealed.	State:
	Each strap to be of finished length 78 cm.	State:
	Each strap shall be attached to the bag attached as follows:	
	Each leg of each webbing strap shall be vertically stitched for a distance of 190 mm with a 2 mm edge-stitching.	State:
	The webbing legs of each strap shall be positioned 170mm apart.	State:
	Boxed and crossed stitched 25 mm at the top and bottom ends.	State:
	Top edge of top box-tack to be positioned 50 mm below the top edge of the bag.	

	Have inside patch pockets of width and depth in accordance with patterns.	State:
	Have a label that shall comply with the requirements as given in paragraph 13.4.	State:
10.3.2	**Inside patch pocket of carry bag:**	
	Be of carry bag material	State:
	Be centrally positioned on the inside, 50 mm above the bottom edge on both sides.	State:
	Be of width and depth 27 cm x 30 cm for all size designations.	State:
	Side and bottom edges to be folded in 12 mm and stitched down 2 mm from the edges.	State:
	Pocket mouth hem shall be double folded of finished width of 30 mm.	State:
	Be vertically bar-tacked at both ends of the pocket mouth opening (full depth of hem).	State:
	Pocket mouth hem to be fitted with a female section of touch and close fastener.	State:
	Of length 50 mm and width 25 mm.	State:
	Vertically positioned and in the center of the pocket mouth.	
	Stitched down 3 mm along all four sides.	State:
	A length of carry bag webbing shall be sewn to the inside of the bag that shall serve as closingmechanism for the pocket mouth.	State:
	Webbing to be of width 25 mm and length 100mm.	State:
	Shall be double folded, with one half attached to the inside of the bag with 2 mm edge-stitching along all edges.	State:
	Other half shall be fitted with a length of male touch and close fastener of length 50 mm tocorrespond with the female section on the pocket mouth.	State:
	Folded over to fasten the pocket mouth opening.	State:
10.4	**Operating manual**	
	Be printed on paperboard as given in paragraph 6.5.	State:
	Be laminated on both sides (waterproof).	State:
	Be of length and width 12.7 cm x 75 mm respectively when folded.	State:
	Be clearly printed with information as specified in **Annex F**	State:
	Provided information in legible and indelible block letters.	State:
	The letters shall be 1.5 mm for lower case and 2 mm for upper case.	State:
	Laid out accordingly as specified in **Annexure G** (content of annex G is given as an example, butactual content shall reflect the actual BRV details).	
10.5	**Assembly**	
	Each full ensemble shall be as follows:	
	A hard armour plate shall be inserted into the outer patch pockets of the front and back panels ofthe outer jacket respectively	State:
	A soft ballistic unit shall be inserted into the LINING pouches of the front and back panels of theouter jacket respectively.	State:
	The operating manual shall be inserted into the patch pocket sewn to the lining of the back panelof the outer jacket.	State:
11.	**STITCHES, SEAMS AND STITCHING**	
	All panels shall be overlocked prior to assembly, including user manual pocket	State:

	edges, shoulder straps,tile pocket on carry bag, etc.	
11.1	**Stitches**	
	Sewing: Single needle lock stitch.	State:
	Overlocking stitch: Three of four thread overlocking stitch.	State:
11.2	**Seams**	
	Seam to be least 20 mm wide (unless otherwise stated).	State:
	Attaching slide fastener: Seam type SSak-1.	State:
		State:
	Superimpose a strip on the fold of a ply of material and seam with the appropriate number of rows of stitches.	State:
	Joining of shoulder and torso flaps seam: Seam type LSbp – 2	State:
		State:
		State:
	Superimpose two plies of material, insert a folded strip , and seam with one row of stitches. Then turn back eachply at the seam and seam through the folded edges with the appropriate number of rows of stitches.	State:
	Body outer edge seams: Seam type SSe-2.	
		State:
	Form seam Type SSa-1, using two plies of material. Then turn back each ply at the seam and seam through theturned edges with the appropriate number of rows of stitches.	State:
	Main seams: seam type SSa-1.	
		State:
	Superimpose two or more plies of material and seam with one row of stitches positioned at the specific distance(s)from the aligned edges.	State:
	Attachment of binding around carry bag seams: Seam type BSa-2 <u>AFTER it has been stitched andoverlocked.</u>	State:

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 323310/2024

		State:
	Fold a binding strip round the edge of a ply or plies of material and seam with the appropriate number of rows of stiches.	State:
	Pocket mouth hem of carry bag inner pockets and mouth hem of back lining patch pocket: seam type EFb-1	State:
		State:
	Turn in the specified width at the edge of a ply of material, fold back the turned edge, and stitch the turned-in and folded portion with the appropriate number of rows of stitches.	State:
11.3.	**Stitching**	
	All raw edges: stitching type EFd.	State:
		State:
	Stitch over the edge of a ply of material with one row of stitches.	State:
11.4.	**Number of stitches**	
	Seaming and top stitching: 40 ± 4 per 10 cm	State:
	Overlocking: 32 ± 4 per 10 cm	State:
	Aramid panels: 25 ± 5 per 10 cm	State:
	Bar tracks: 12 ± 1 per 1 cm	State:
12.	**QUALIFICATION PROCESS**	
	See Annex A.	State:
13.	**LABEL AND MARKING REQUIREMENTS**	
13.1	**Outer jacket label properties and markings shall include:**	
	Label requirements	
	Be white woven fabric labels that are printed in black and permanently secured.	State:
	To comply with SANS 1309 "Printed labels for textiles".	State:
	Label to outlast the outer jacket.	State:
	Printing requirements	
	Information to be in legible and indelible block letters of height at least 3 mm.	State:
	Ink to comply with the requirements of SANS 432 "Indelible marking ink for textiles".	State:
	Markings to outlast the outer jacket.	State:
	Label types	
	The outer jacket shall have two types of labels, i.e. identification label and care-label:	State:

	a) Identification labels	
	One label on the front lining and one label on the back lining.	State:
	Front label to be securely sewn, centrally positioned in the width of the front liningpanel, and 50 mm below the neck.	State:
	Back label to be securely sewn, centrally positioned in the width of the user manualpocket.	State:
	Printed information to comply with those given in Annex B, Figure B-1.	State:
	To be of nominal size 90 mm x 140 mm.	State:
	b) Care-instruction label	
	Each front and back panel shall have a label that provides correct and appropriate care instructions in accordance with SANS10011 “Care-labelling of textile piece- goods, textile articles and clothing”.	State:
	Each label to include the composition of the main fabric in accordance with the requirements of SANS 10235 “Fibre-content labelling of textiles and textile products”.	State:
	Sewn down along all four edges below the identification label on the front and sewn in below the user manual pocket on the back.	State:
	The VAT number of the contractor.	State:
	To be of nominal size 40 mm x 70 mm.	State:
13.2	**Hard armour plate markings**	
	NOTE: All records shall be kept for a minimum period of 10 years and copy thereof shall be submittedto the SAPS upon completion of the contract.	State:
	Printing to comply with the following:	
	Printing shall be done on the body side of the plate.	State:
	Printing shall comply with the requirements of SANS 432 “Indelible marking ink for textiles” and not damage the material composition or influence or have a negative impact on the ballistic performance.	State:
	Printed information to be as given in Annex D.	State:
	Information to be in legible and indelible block letters of height at least 3 mm, unless otherwisespecified.	State:
	The sentence “THIS SIDE FACES THE BODY” shall be of height at least 10 mm.	State:
	Printing colour shall be white and such that it shall outlast the plates.	State:
	To display the Item Control Number as given in table 14.	State:
13.3	**Soft ballistic unit markings**	
	NOTE: All records shall be kept for a minimum period of 10 years and copy thereof shall be submittedto the SAPS upon completion of the contract.	State:
13.3.1.	**Inner material of soft ballistic unit shall:**	
	NOTE: All records shall be kept for a minimum period of 10 years and copy thereof shall be submitted to the SAPS upon completion of the contract.	
	Inner material layers of soft ballistic unit shall:	State:
	Incorporate identifiable markings that shall display the following information on each layer, spaced and repeated in such a way that irrespective of the size of the cut panel, all information shall be visible on each textile layer (may be in the bar-code format):	State:
	➢ Twaron or Kevlar, equivalent (as relevant)	State:

	➢ Mass of fabric	State:
	➢ Manufacturer's (weaver) name or trade mark or both	State:
	➢ Year of manufacture	State:
	➢ Shall have the lot and batch number of the yarn supplier	State:
	Shall be boldly printed with a black marker pen of which the ink is thin lined and the content not damaging the chemical composition and negatively impacts on the performance of the ballistic material.	State:
	The information shall be read clearly through the PVC casing after it has been sealed	State:
	Markings to be such that it shall outlast the soft ballistic unit	State:
	Markings to also include a manufacturer's in-house generated numbering system for identification purposes which shall be traceable back to raw materials	State:
	Outer casing of soft ballistic unit shall be identified as follows:	State:
	Printing shall comply with the requirements of SANS 432 "Indelible marking ink for textiles"	State:
	Be such that the markings shall outlast the soft ballistic units	State:
	Printed information to be as given in Annex C	State:
	Information to be in legible and indelible letters of height at least 3 mm (lower case) and 5 mm (upper case), unless otherwise specified	State:
	The sentence "THIS SIDE FACES THE BODY" shall be of height at least 10 mm	State:
	The information shall be positioned approximately 70 mm below the centre back and centre front neck in the colours and correlating size as given in table 10	State:
	To display the Item Control Numbers of the front or back soft ballistic unit (as relevant and as given in table 14 or 15)	State:
	Printed information to include a manufacturer's in-house generated numbering system for identification purposes which shall be traceable back to raw materials	State:
13.3.2	**Outer casing of soft ballistic unit shall be identified as follows:**	
	Printing shall comply with the requirements of SANS 432 "Indelible marking ink for textiles".	State:
	Be such that the markings shall outlast the soft ballistic units.	State:
	Printed information to be as given in Annex C.	State:
	Information to be in legible and indelible letters of height at least 3 mm (lower case) and 5 mm(upper case), unless otherwise specified.	State:
	The sentence "THIS SIDE FACES THE BODY" shall be of height at least 10 mm.	State:
	The information shall be positioned approximately 70 mm below the centre back and centre frontneck in the colours and correlating size as given in table 11.	State:
	To display the Item Control Numbers of the front or back soft ballistic unit (as relevant and asgiven in table 15 or 16).	State:
	Printed information to include a manufacturer's in-house generated numbering system foridentification purposes which shall be traceable back to raw materials.	State:
13.4.	**Carry bag markings**	
	Each carry bag shall include the following labels:	
	Label requirements.	State:
	Be white woven fabric labels that are printed in black and permanently secured.	State:
	To comply with SANS 1309 "Printed labels for textiles".	State:

	Label to outlast the bag.	State:
	Printing requirements.	State:
	Information to be in legible and indelible block letters of height at least 3 mm.	State:
	Ink to comply with the requirements of SANS 432 “Indelible marking ink for textiles”.	State:
	Markings to outlast the bag.	State:
	Label types.	State:
	Each bag shall have two types of labels, i.e. identification labels and care-labels.	
	Identification labels	
	Printed information to comply with those given in Annex B, Figure B-2.	State:
	To display the Item Control Numbers as given in table 12.	State:
	To be of nominal size 90 mm x 140 mm.	State:
	Care-instruction label	
	each bag shall have a label that provides correct and appropriate care instructions in accordance with SANS10011 “Care-labelling of textile piece-goods, textile articles andclothing” securely sewn in with the herringbone binding along the side seam on the inside.	State:
	each label to include the composition of the main fabric in accordance with the requirements of SANS 10235 “Fibre-content labelling of textiles and textile products”.	State:
	sewn in with the side seam of the bag on the inside or alternatively sewn to the patch pocket on the inside.	State:
14.	**PACKING AND MARKING OF PACKAGING**	
14.1	**Packing**	
	NOTE: If bullet resistant vests are ordered, the supplier shall supply the fully assembled body armour - consistingof an outer jacket, removable front and back soft ballistic units, two removable hard armour plates, an operating manual and a carry bag - unless otherwise specified in the order or contract	State:
14.1.1	**If the complete body armour ensemble is ordered (as per table 12 (a)) (consisting of an outer jacket, removable front and back soft ballistic units, two removable hard armour plates, an operating manual and a carry bag) thepackaging shall comply with the following:**	State:
	Delivered in a commercially dry condition	State:
	Packed per size in a carry bag (with correct colour binding/correct size) in such a way that theywill not be damaged in transit or in storage	State:
	Acceptably packed for transportation in acceptable bulk containers (maximum 10 units) that comply with requirements of Document 05181-100-209 “Corrugated board boxes for clothing and footwear	State:
14.1.2	**If the complete body armour ensemble is ordered (as per table 12 (a)) (consisting of an outer jacket, removable front and back soft ballistic units, two removable hard armour plates, an operating manual and a carry bag) thepackaging shall comply with the following:**	State:
	Delivered in a commercially dry condition.	State:
	Packed per size in a carry bag (with correct colour binding/correct size) in such a way that theywill not be damaged in transit or in storage.	State:
	Acceptably packed for transportation in acceptable bulk containers (in units of 10	State:

ORIGINAL

	to 20, depending on the size) that comply with requirements of Document 05181-100-209 “Corrugated board boxes for clothing and footwear.	
14.1.3	**If only hard armour plates are ordered, packaging shall comply with the following:**	
	Delivered in a commercially dry condition.	State:
	Individually packed in a firm cushioned envelope to suitably protect them from dust/ moisture/breakage to ensure that they will not be damaged in transit or in storage.	State:
	The plates shall then be packed into double walled cardboard boxes of dimensions 32 cm x 29 cmx 16 cm, containing a maximum of 7 plates per box.	State:
14.1.4	**If soft ballistic units, outer jackets or carry bags are ordered individually,the packaging for each component shall comply with the following:**	
	Shall be individually sealed in plastics envelopes of suitable size and shape	State:
	The plastics envelope shall have a sticker type label that shall be marked with the following information:	
	– Item description. – Item control number. – Batch or lot number. – Size designation.	State:
	Acceptably packed for transportation in acceptable bulk containers that comply with requirementsof Document 05181-100-209 “Corrugated board boxes for clothing and footwear”	State:
14.2	**Bulk container marking**	
	In addition to the address for delivery, each bulk container shall be labelled with additional information on the <u>four sides of the lids (outer component)</u>. The information shall bewritten or printed in legible and indelible block letters and the label shall be of minimum A4-paper size, and shall contain the following:	State:
	– Order number. – Item description. – Quantity in the box. – Number of box, e.g. 1 of 10. – Manufacturer’s name and/or trademark. – VAT number of the contractor.	State:
	Additional marking	
	When so required by the South African Police Service, Supply Chain Management, all body armour, carry bags, soft ballistic panels and casing, hard armour plates, plastics envelopes or bulk containers (or any combination of these to bear information additional to that specified above, e.g. the inclusion of bar coded item labels.	State:
15.	**ITEM CONTROL NUMBERS**	
	Item control numbers attached to the document.	
16.	**Normative references**	
	The following standards contain provisions which, through reference in this text, constitute provisions of this 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 indicated below. Information on currently valid national and	State:

	international standards may be obtained from the South African Bureau of Standards. – 05181-100-209: Corrugated board boxes for clothing and footwear. – AATCC method 20, Fiber analysis: Qualitative. (Available from http://www.aatcc.org/Technical/Test_Methods/scopes/tm20.cfm) – CKS 129: Colours for textiles. – NIJ 0101.04: Ballistic resistance of personal body armour (National Institute of Justice – USA). – SANS 79: Textiles - Mass per unit area of conditioned fabrics. – SANS 85: Thickness of wool fabrics. – SANS 432: Indelible marking ink for textiles – SANS 1309: Printed labels for textiles – SANS 1362: Sewing threads – SANS 1387-2: Woven cotton and similar apparel fabrics – Part 2: Polyester-and-cotton work wear fabrics. – SANS 1585:2008, Coated fabrics for shelters and rainwear. – SANS 1658:2007, Ballistic resistance of body armour. – SANS 1822, Slide fasteners – SANS 1823, Touch and close fasteners – SANS 5300, Water repellence of textile fabrics (Spray test) – SANS 5278, Sewing stitches per unit length – SANS 5488, Width of ribbons and other narrow fabrics. – SANS 10011, Care-labelling of textile and clothing – SANS 10076-1: The assessment of defects in textile piece-goods and made-up articles – Part 1: Defects in woven piece-goods (cellulosic and cellulosic blends). – SANS 10076-6: The assessment of defects in textile piece-goods and made-up articles – Part 6: Defects in woven filament piece goods. – SANS 10235, Fiber content labelling of textiles and textile products. – SANS 10371: Terms and definitions for clothing – SANS 10371: Terms and definitions for clothing – SANS 13934-1: Textiles - Tensile properties of fabrics Part 1:	

.

17. Images and illustrations

Images and illustrations are not to scale and are for guidance only.

Figure 1 – Front panel of vest

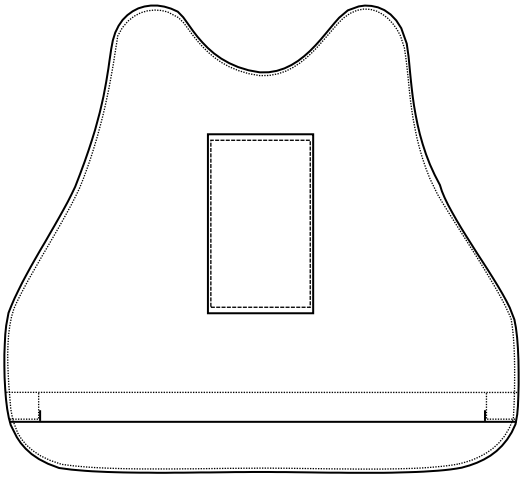


Figure 2 – Inside view of front panel of vest

Figure 3 - Back panel of vest

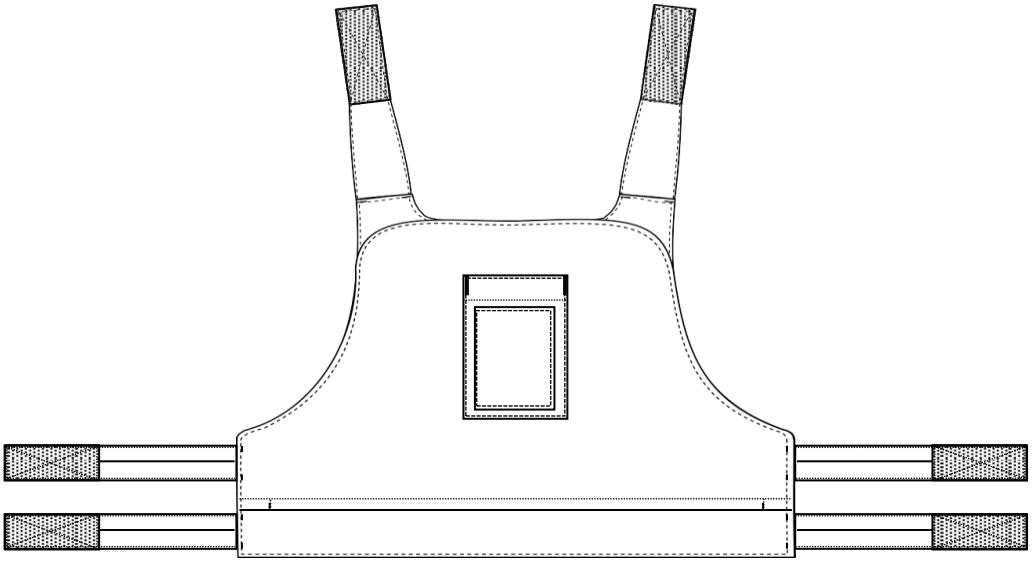


Figure 4 – Inside view of back panel of vest

Table 2 – Webbing requirements

1	2	3
Property	**Requirement**	**SANS number** (unless otherwiseindicated)
Composition, %	All continuous filament polyester	AATCC 20
Selvedge	Lockstitch	Physical analysis
Width, mm.....	47 ± 1	5488
Thickness, mm	1.10 ± 0.10	85
Breaking strength, min. KN	26.0	13934-1

Table 3 – Covered hard armour plate requirements

1	2	3	4
Weight	**Width**	**Length**	**Top and bottom corners**
2.00 kg ± 0.05 kg	237 mm ± 3 mm	287 mm± 3 mm	30 mm x 30 mm

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 323310/2024

Table 4 – Requirements for carry bag outer material

1 **Property**	2 **Requirements**	3 **Method of test**
Fibre composition	100% Polyester	AATCC 20
Weave	Plain	Visual examination
Mass per unit area, g/m², min.	115	SANS 79
Tensile strength, N, min		SANS 13934 - 1
Warp	1600	
Weft	1200	
Tearing strength, N, min.		SANS 13937-4 [a]
Warp	150	
Weft	100	
Spray test, min.	4	SANS 5300
[a] Use test specimens of size 180 mm X 150 mm and a tongue width of 50 mm. Report the mean of the median peak values.		

Table 5 - Colours identification of the edge binding

1	2	3	4	5	6	7	8
Small	**Medium**	**Large**	**X-Large**	**XX-Large**	**XXX-Large**	**4X-Large**	**5X-Large**
Light Blue	Olive Green	Signal Red	Black	Yellow	Brown	Purple	Royal Blue

Table 6 – Webbing requirements for carry bag handles

1 **Property**	2 **Requirement**	3 **SANS number** (unless otherwise indicated)
Composition, %	All continuous filament polyester	AATCC 20
Weave	Pebble	Physical analysis
Selvedge	Lockstitch	Physical analysis
Width, mm.....	25 ± 1	5488
Thickness, mm	0.95 ± 0.10	85
Breaking strength, min. KN	8.0	13934-1
Mass/100 m, g	1900	5330
Number of weft threads per 10 cm.....	160 ± 2	Physical analysis

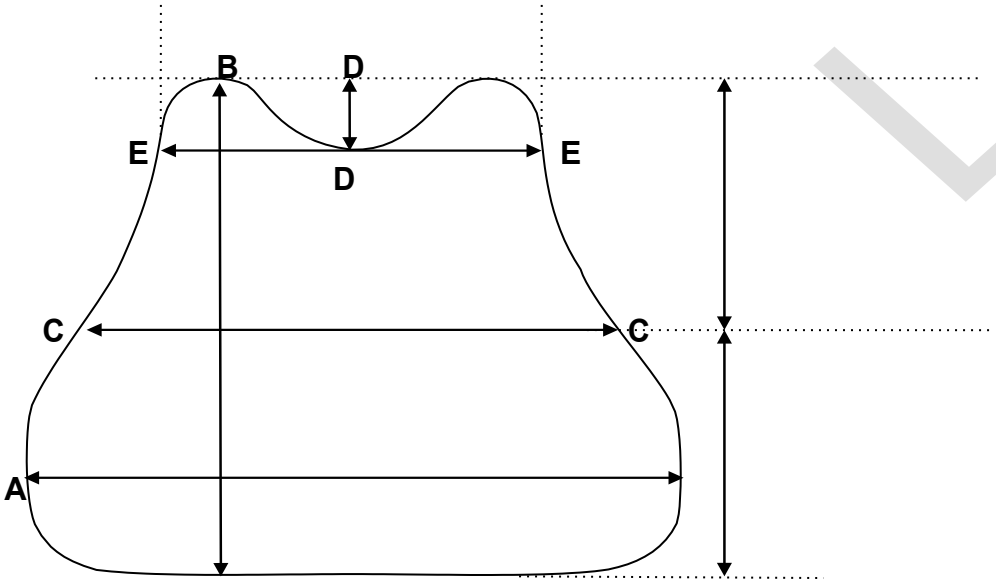
SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

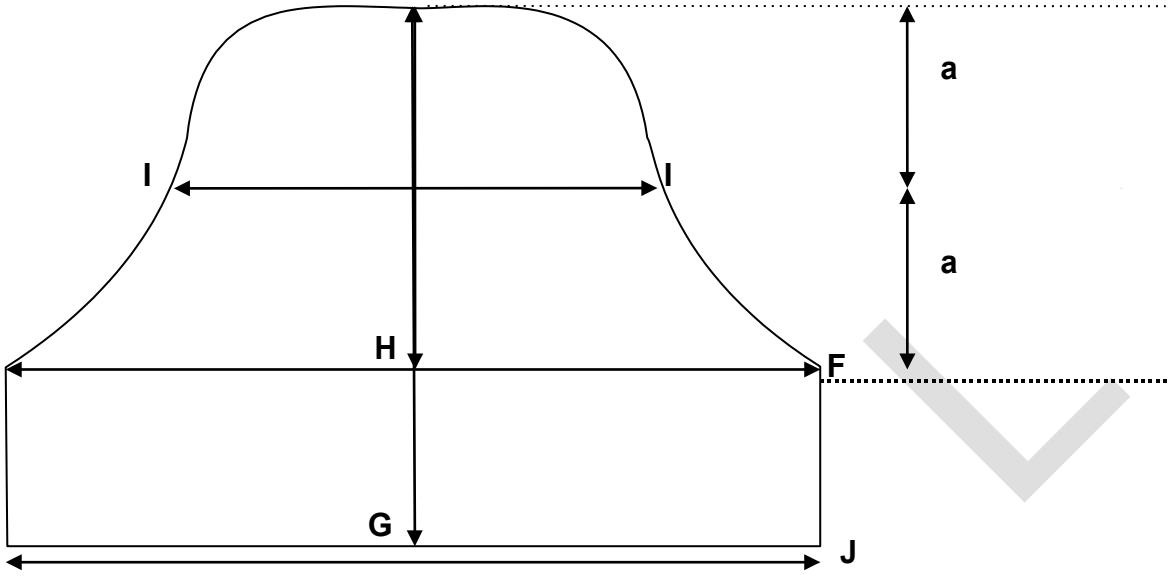
SPEC NUMBER: 323310/2024

SIZE AND DIMENSIONS (MEASURING POINTS)

MEASURING POINT		DESCRIPTION
		FRONT PANEL
A – A	**Bottom width**	Measure across the front at the widest point, from the one side to the other.
B – B	**Front length**	Measure from the centre shoulder point to the bottom edge of the frontpanel.
C – C	**Across body**	Measure across the front at the midpoint from one side to the other.
D – D	**Neck drop**	Measure vertically, from a point in line with the shoulder to the top edge ofthe front panel at centre front.
E – E	**Top width**	Measure across the front directly below the neck hollow from one side to theother.

Measuring points of soft ballistic units





MEASURING POINT		DESCRIPTION
BACK PANEL		
F – F/J – J	**Bottom width**	Measure across the back at the widest point, from the one side to the other.
G – G	**Back length**	Measure from the centre back point to the bottom edge of the back panel.
G – H	**Depth of scye**	Measure in a straight line from the centre back point to a point in line with the base of the scye (base of curve).
I – I	**Top width**	Measure across the front at the midpoint of the curved section from one side to the other.

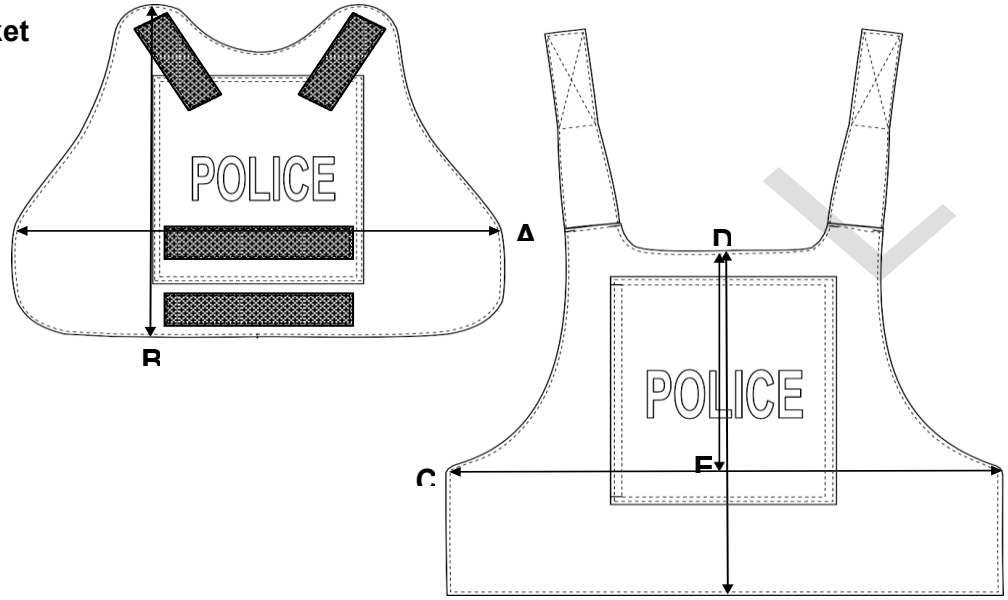
Table 7(a) – Dimensions of the front panel of the inner soft ballistic panel

1	2	3	4	5	6
Size designation[1]	**Nominal finished garment measurements, cm**				
	Bottom width	**Front length**	**Across body**	**Neck drop**	**Top width**
Small (87 – 92)	46	42	36	8	30
Medium (97 – 102)	51	43.5	38	8	31
Large (107 – 112)	55	45	40	8	32
X-Large (117 – 122)	61	46.5	42	8	33
2X-Large (127 – 132)	66	48	44	8	34
3X-Large (137 – 142)	71	49.5	46	8	35
4X-Large (147 – 152)	76	51	48	8	36
5X-Large (157 – 162)	81	52.5	50	8	37
[1] Based on the chest circumference of the wearer in centimeters					

Table 7(b) – Dimensions of the back panel of the inner soft ballistic panel

1	2	3	4	5
Size designation[1]	**Nominal finished garment measurements, cm**			
	Bottom width	**Back length**	**Depth of scye**	**Top width**
Small (87 – 92)	46	40	27	30
Medium (97 – 102)	51	41.5	28	31
Large (107 – 112)	56	43	29	32
X-Large (117 – 122)	61	44.5	30	33
2X-Large (127 – 132)	66	46	31	34
3X-Large (137 – 142)	71	47.5	32	35
4X-Large (147 – 152)	76	49	33	36
5X-Large (157 – 162)	81	50.5	34	37
[1] Based on the chest circumference of the wearer in centimetres				

8.2 Measuring points of outer jacket



MEASURING POINT		DESCRIPTION
A – A	**Front width**	Measure across the front at the widest point, from the one side seam to theother.
B – B	**Front length**	Measure from the neck point to the bottom edge of the front panel.
C – C	**Back width**	Measure across the back at the base of the scye from the one side seam tothe other.
D – D	**Back length**	Measure from the centre back neck point to the bottom edge of the backpanel.
D – E	**Depth of scye**	Measure from the centre back neck to a point level with the base of the scye.

Table 7(c) – Dimensions of the front panel and back panel of the outer jacket

Table 7(c) – Dimensions of the front panel and back panel of the outer jacket

1	2	3	4	5	6
Size designation[1]	**Nominal finished garment measurements, cm**				
	Front width	**Front length**	**Back width**	**Back length**	**Depth of scye**
Small (87 – 92)	48	44	48	42	28
Medium (97 – 102)	53	45.5	53	43.5	29
Large (107 – 112)	58	47	58	45	30
X-Large (117 – 122)	63	48.5	63	46.5	31
2X-Large (127 – 132)	68	50	68	48	32
3X-Large (137 – 142)	73	51.5	73	49.5	33
4X-Large (147 – 152)	78	53	78	51	34
5X-Large (157 – 162)	83	54.5	83	52.5	35
1 Based on the chest circumference of the wearer in centimeters					

Figure 5 – Front panel of vest

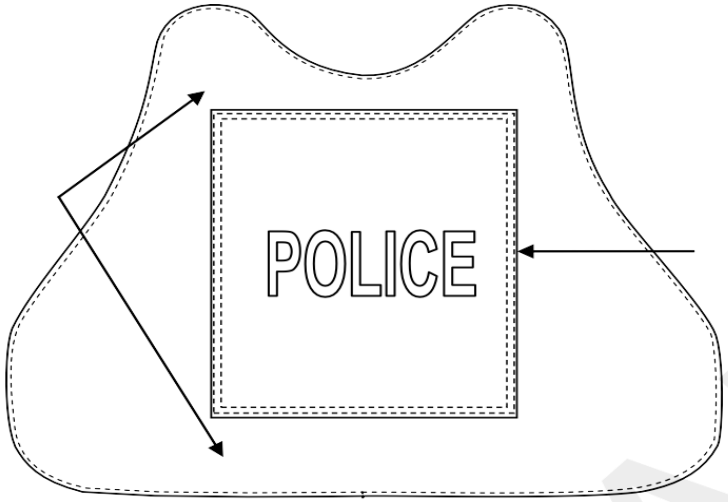


Table 8 – Positioning of front pocket

Size	Positioning below the centre front of the neckline
S	15 mm
M	15 mm
L	25 mm
XL	25 mm
XXL	25 mm
XXXL	30 mm
4XL	30 mm
5XL	30 mm

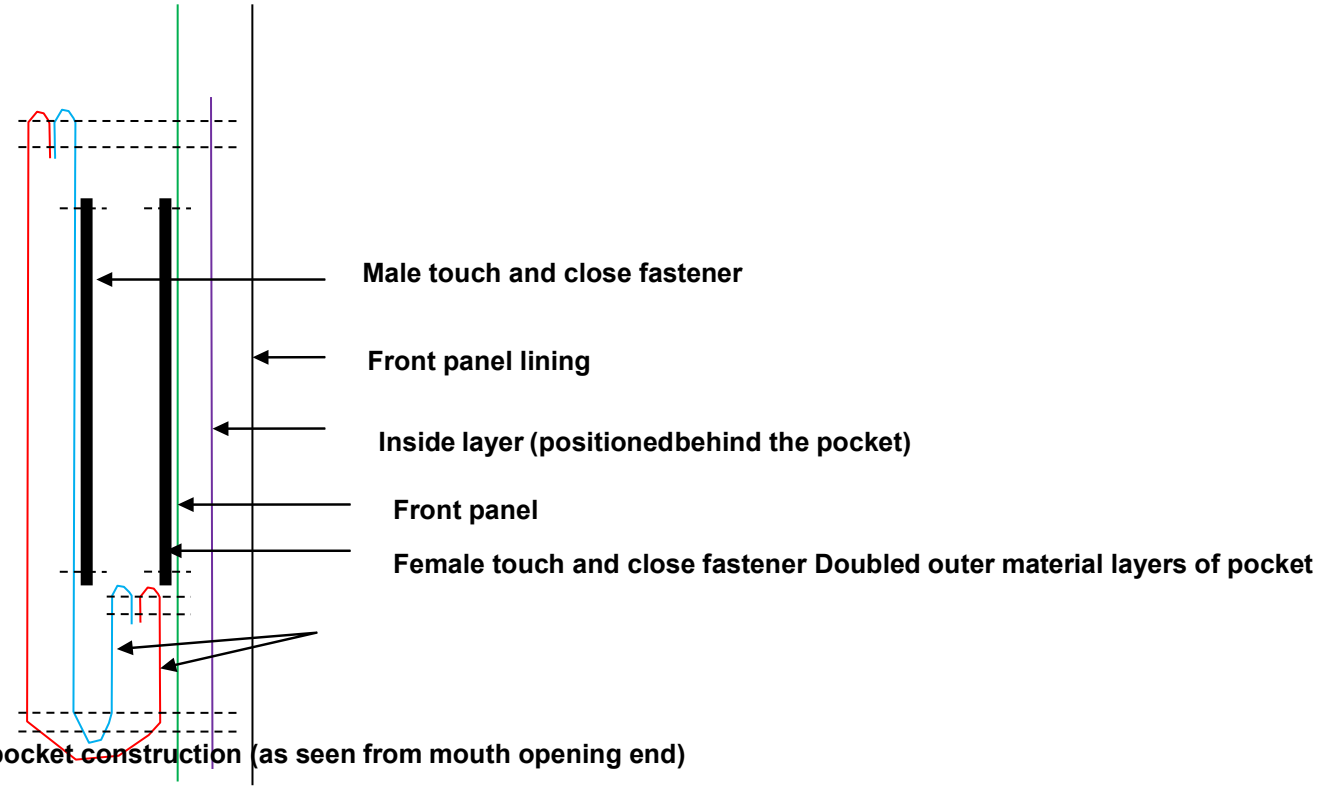


Figure 6 – Cross section of front pocket construction (as seen from mouth opening end)

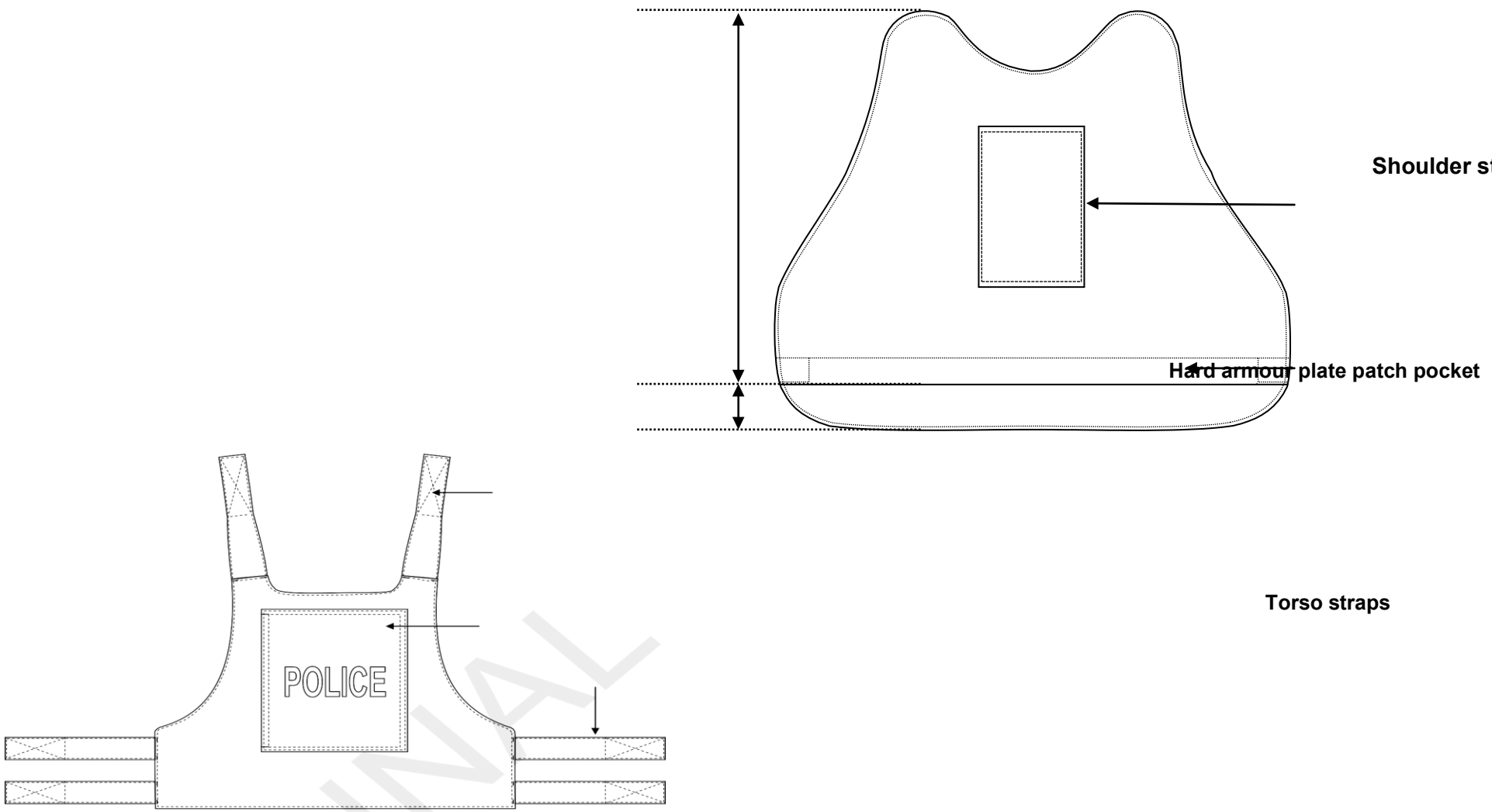


Figure 8 – Front panel of vest

ORIGINAL

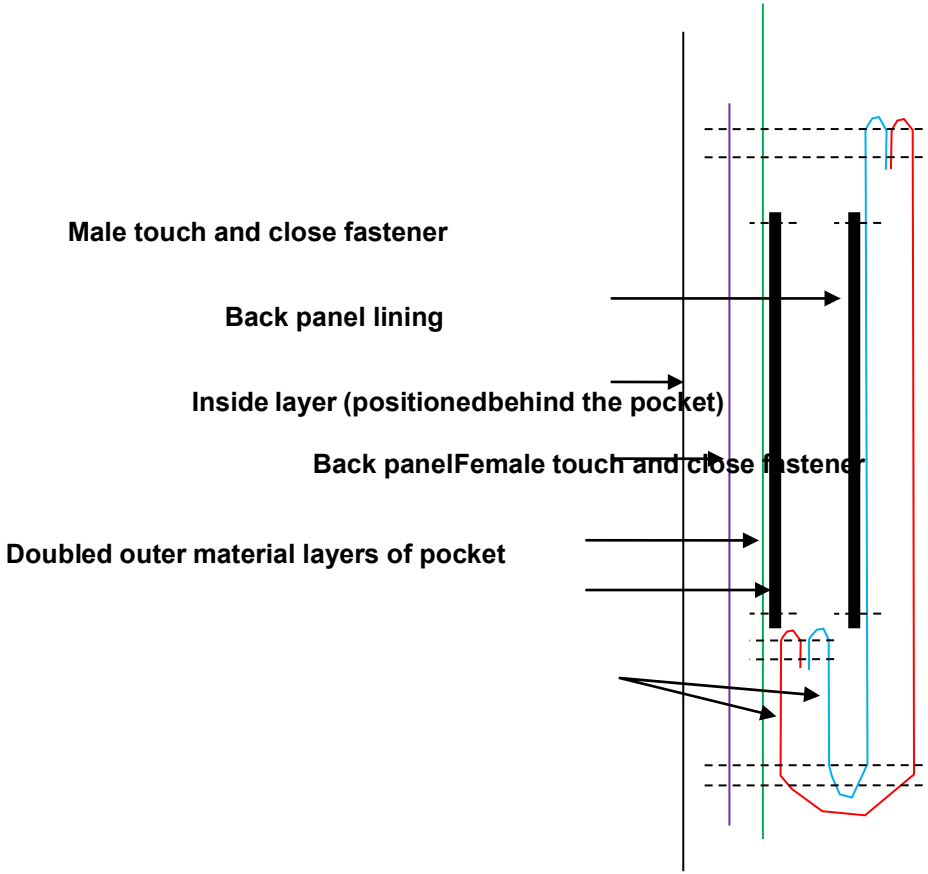


Figure 9 – Cross section of back pocket construction (as seen from mouth opening end)

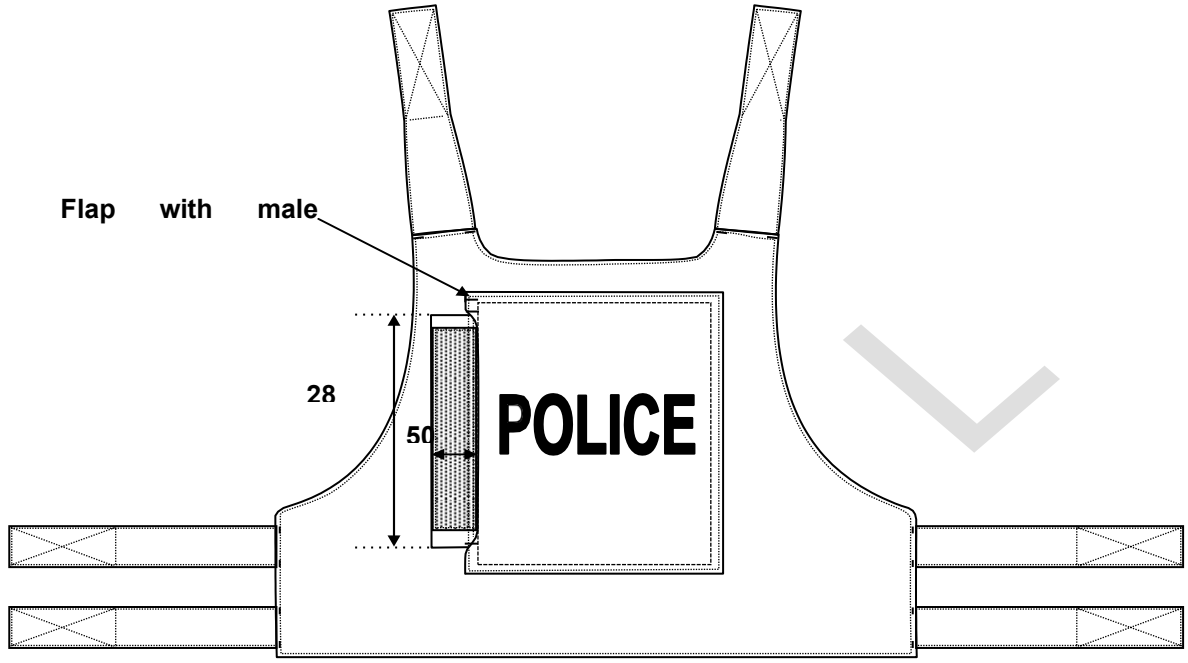


Figure 10 – Hard armour plate patch pocket (with pocket flap visible)

Figure 11 – Back panel lining

Table 9 – Torso strap sizes

Size	Length
S	170 mm
M	200 mm
L	230 mm
XL	260 mm
XXL	290 mm
XXXL	320 mm
4XL	350 mm
5XL	370 mm

Table 10 – Dimensions of finished carry bag (see figure 13)

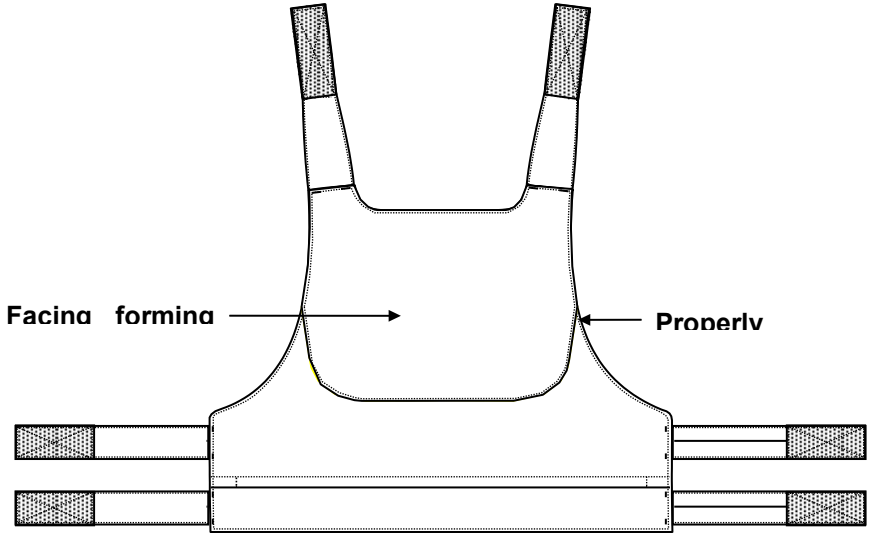


Table 9 – Dimensions of carry bag (see figure 9)

Size designation	Depth (Y)	Width (X)
Small and Medium	55 cm	60 cm
Large and X-Large	60 cm	70 cm
2X-Large and 3X-Large	65 cm	80 cm
4X-Large and 5X-Large	65 cm	90 cm

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF A MALE BEIGE COLOUR & A CONCEALED BULLET RESISTANT VESTS TO THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 323310/2024

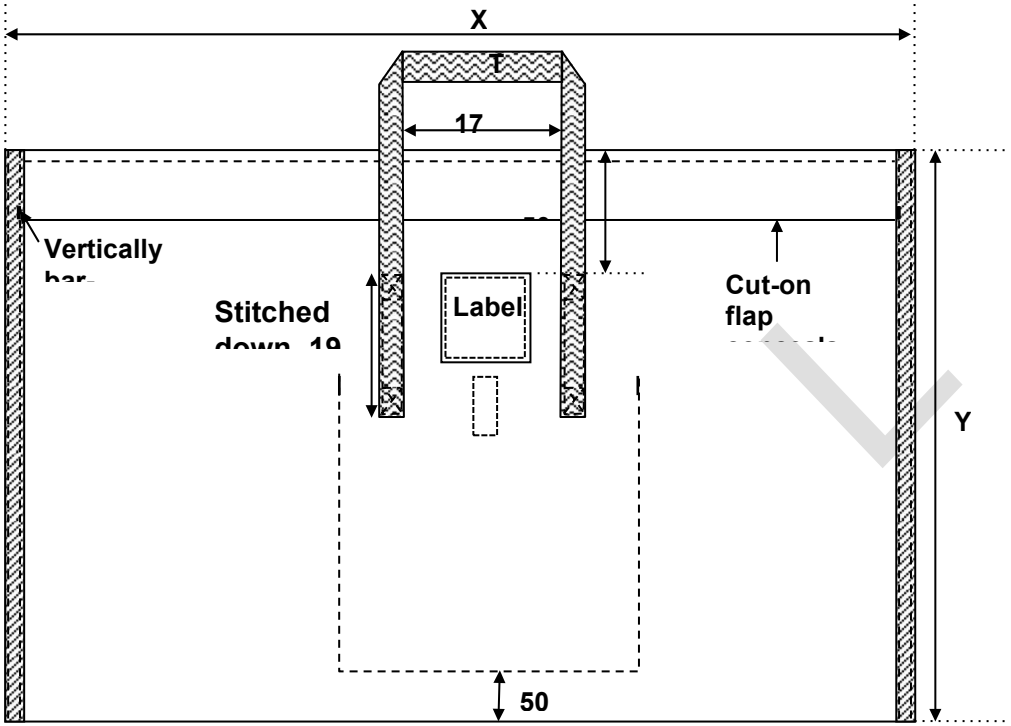


Table 11 – Printing colours on outer casing of soft ballistic panels

1	2	3	4	5	6	7	8
Small	**Medium**	**Large**	**X-Large**	**XX-Large**	**XXX-Large**	**4X-Large**	**5X-Large**
Light Blue	Olive Green	Signal Red	Black	Yellow	Brown	Purple	Royal Blue

Table 12(a) – Item Control Numbers for fully assembled body armour ensembles

NOTE: *The Item Control Numbers below shall be displayed on the outside label of the carry bag as relevant.*

1	**2**	**3**
SAPS Beige		**Size**
Item Control Number	**Item description**	
8470T05009486	Vest, Bullet Resistant, Beige, Complete, Size Small (New Type)	S
8470T05009485	Vest, Bullet Resistant, Beige, Complete, Size Medium (New Type)	M
8470T05009484	Vest, Bullet Resistant, Beige, Complete, Size Large (New Type)	L
8470T05009487	Vest, Bullet Resistant, Beige, Complete, Size XL (New Type)	XL
8470T05009488	Vest, Bullet Resistant, Beige, Complete, Size XXL (New Type)	XXL
8470T05009489	Vest, Bullet Resistant, Beige, Complete, Size XXXL (New Type)	XXXL
8470T05012734	Vest, Bullet Resistant, Beige, Complete, Size XXXXL (New Type)	4XL
8470T05012735	Vest, Bullet Resistant, Beige, Complete, Size XXXXXL (New Type)	5XL

able 12(b) – Item Control Numbers for body armour <u>WITHOUT</u> hard armour plates

NOTE: *The Item Control Numbers below shall be displayed on the outside label of the carry bag as relevant.*

1	2	3
SAPS Beige		**Size**
Item Control Number	**Item description**	
8470T05007374	Vest, Bullet Resistant, Beige, W/Out Tile, Size Small (New Type)	S
8470T05007375	Vest, Bullet Resistant, Beige, W/Out Tile, Size Medium (New Type)	M
8470T05007377	Vest, Bullet Resistant, Beige, W/Out Tile, Size Large (New Type)	L
8470T05007378	Vest, Bullet Resistant, Beige, W/Out Tile , Size XL (New Type)	XL
8470T05007380	Vest, Bullet Resistant, Beige, W/Out Tile, Size XXL (New Type)	XXL
8470T05007381	Vest, Bullet Resistant, Beige, W/Out Tile, Size XXXL (New Type)	XXXL
8470T05011396	Vest, Bullet Resistant, Beige, W/Out Tile, Size 4XL (New Type)	4XL
8470T05011397	Vest, Bullet Resistant, Beige, W/Out Tile , Size 5XL (New Type)	5XL

1	2	3	4	5
SAPS Grey field-dress		**SAPS Beige**		**Size**
Item Control Number	**Item description**	**Item Control Number**	**Item description**	
8470T05009500	Vest, Bullet Resistant, Grey, Outer, Size Small (New Type)	8470T05009508	Vest, Bullet Resistant, Beige, Outer, Size Small (New Type)	S
8470T05009499	Vest, Bullet Resistant, Grey, Outer, Size Medium (New Type)	8470T05009507	Vest, Bullet Resistant, Beige, Outer, Size Medium (New Type)	M
8470T05009498	Vest, Bullet Resistant, Grey, Outer, Size Large (New Type)	8470T05009506	Vest, Bullet Resistant, Beige, Outer, Size Large (New Type)	L
8470T05009501	Vest, Bullet Resistant, Grey, Outer, Size XL (New Type)	8470T05009509	Vest, Bullet Resistant, Beige, Outer, Size XL (New Type)	XL
8470T05009502	Vest, Bullet Resistant, Grey, Outer, Size XXL (New Type)	8470T05009510	Vest, Bullet Resistant, Beige, Outer, Size XXL (New Type)	XXL
8470T05009503	Vest, Bullet Resistant, Grey, Outer, Size XXXL (New Type)	8470T05009511	Vest, Bullet Resistant, Beige, Outer, Size XXXL (New Type)	XXXL
8470T05009504	Vest, Bullet Resistant, Grey, Outer, Size 4XL (New Type)	8470T05042434	Vest, Bullet Resistant, Beige, Outer, Size 4XL (New Type)	4XL
8470T05009505	Vest, Bullet Resistant, Grey, Outer, Size 5XL (New Type)	8470T05042435	Vest, Bullet Resistant, Beige, Outer, Size 5XL (New Type)	5XL

Table 14 – Item Control Numbers for hard armour plate only

1	2
Item Control Number	**Item description**
8470180160613	Tile, Ceramic, Bullet Resistant, Multi Curve

ORIGINAL

Table 15 – Item Control Numbers for FRONT inner soft ballistic unit only

1	2	3
Item Control Number	**Item description**	
8470T05009522	Vest, Bullet Resistant, Inner, Front, Size Small (New Type)	S
8470T05009521	Vest, Bullet Resistant, Inner, Front, Size Medium (New Type)	M
8470T05009520	Vest, Bullet Resistant, Inner, Front, Size Large (New Type)	L
8470T05009523	Vest, Bullet Resistant, Inner, Front, Size X Large (New Type)	XL
8470T05009524	Vest, Bullet Resistant, Inner, Front, Size XX Large(New Type)	XXL
8470T05009525	Vest, Bullet Resistant, Inner, Front, Size XXX Large (New Type)	XXXL
8470T05009526	Vest, Bullet Resistant, Inner, Front, Size 4X Large (New Type)	4XL
8470T05009527	Vest, Bullet Resistant, Inner, Front, Size 5X Large (New Type)	5XL

Table 16 – Item Control Numbers for BACK inner soft ballistic unit only

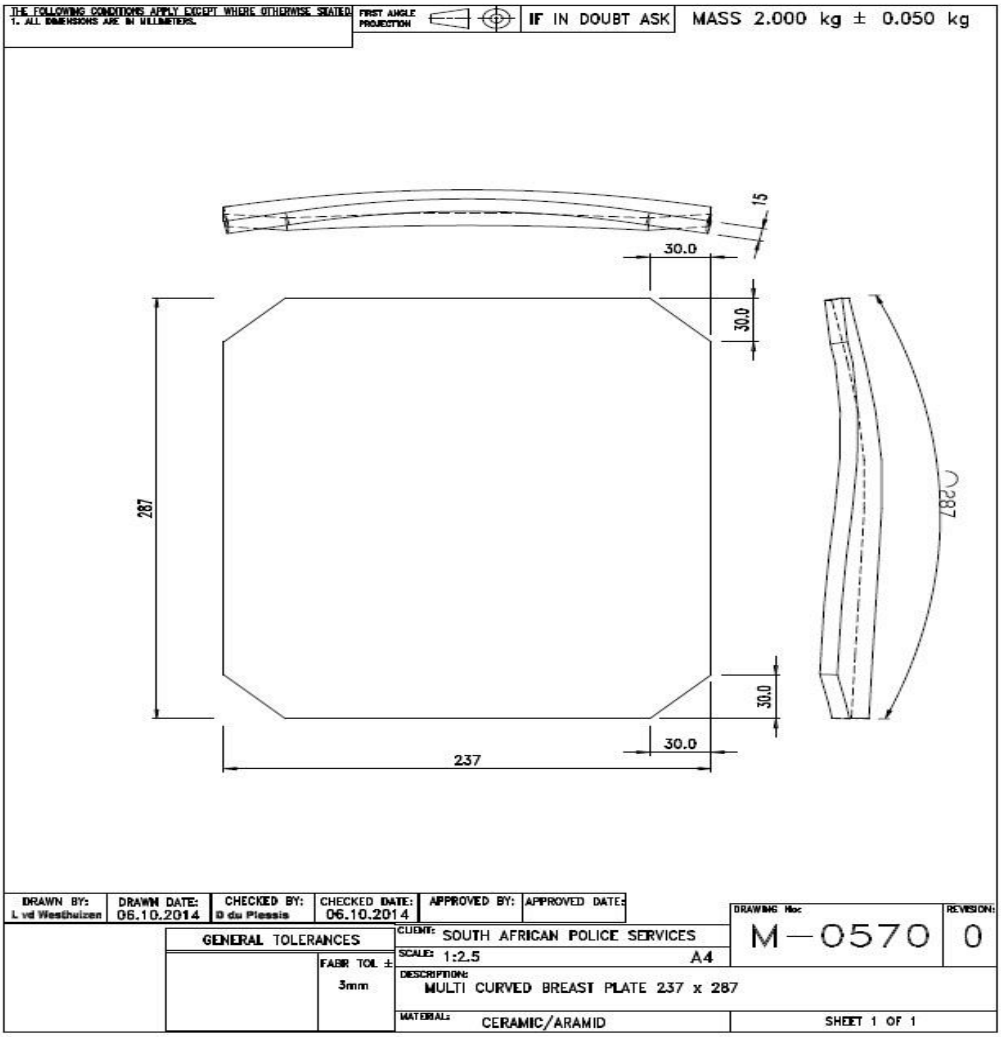
1	2	3
Item Control Number	**Item description**	
8470T05009514	Vest, Bullet Resistant, Inner, Rear, Size Small (New Type)	S
8470T05009513	Vest, Bullet Resistant, Inner, Rear, Size Medium (New Type)	M
8470T05009512	Vest, Bullet Resistant, Inner, Rear, Size Large (New Type)	L
8470T05009515	Vest, Bullet Resistant, Inner, Rear, Size X Large (New Type)	XL
8470T05009516	Vest, Bullet Resistant, Inner, Rear, Size XX Large(New Type)	XXL
8470T05009517	Vest, Bullet Resistant, Inner, Rear, Size XXX Large (New Type)	XXXL
8470T05009518	Vest, Bullet Resistant, Inner, Rear, Size 4X Large (New Type)	4XL
8470T05009519	Vest, Bullet Resistant, Inner, Rear, Size 5X Large (New Type)	5XL

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

Size	Chest measurements in cm
Small	87-92
Medium	97-102
Large	107-112
x-Large	117-122
xx-Large	127-132
xxx-Large	137-142
4x-Large	147-152
5x-Large	157-162

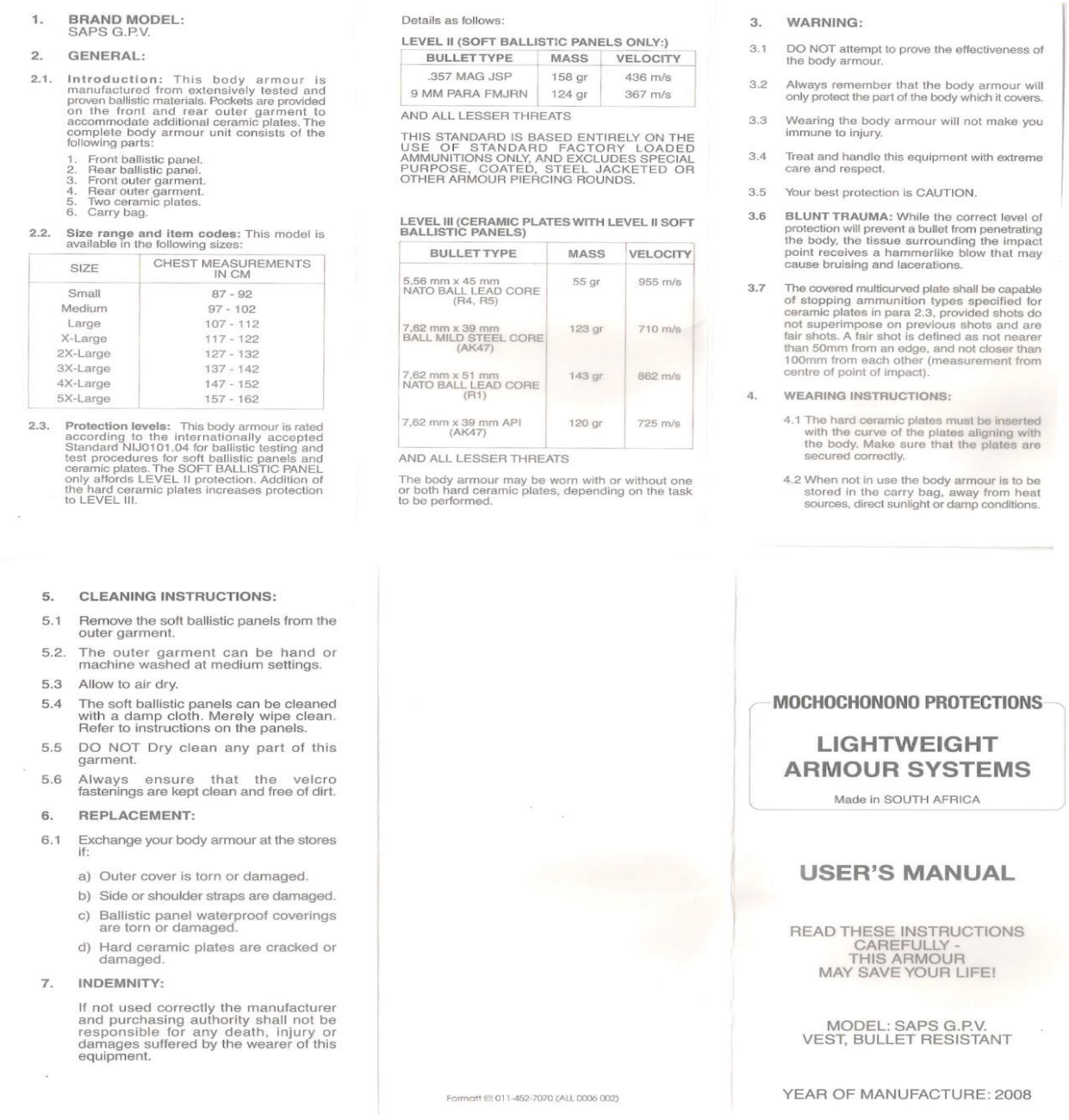
Design and dimensions of hard armour plates



SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

Layout of user manual



1. **BRAND MODEL:**
SAPS G.P.V.

2. **GENERAL:**

2.1. **Introduction:** This body armour is manufactured from extensively tested and proven ballistic materials. Pockets are provided on the front and rear outer garment to accommodate additional ceramic plates. The complete body armour unit consists of the following parts:

1. Front ballistic panel.
2. Rear ballistic panel.
3. Front outer garment.
4. Rear outer garment.
5. Two ceramic plates.
6. Carry bag.

2.2. **Size range and item codes:** This model is available in the following sizes:

SIZE	CHEST MEASUREMENTS IN CM
Small	87 - 92
Medium	97 - 102
Large	107 - 112
X-Large	117 - 122
2X-Large	127 - 132
3X-Large	137 - 142
4X-Large	147 - 152
5X-Large	157 - 162

2.3. **Protection levels:** This body armour is rated according to the internationally accepted Standard NIJ0101.04 for ballistic testing and test procedures for soft ballistic panels and ceramic plates. The SOFT BALLISTIC PANEL only affords LEVEL II protection. Addition of the hard ceramic plates increases protection to LEVEL III.

Details as follows:

LEVEL II (SOFT BALLISTIC PANELS ONLY:)

BULLET TYPE	MASS	VELOCITY
.357 MAG JSP	158 gr	436 m/s
9 MM PARA FMJRN	124 gr	367 m/s

AND ALL LESSER THREATS

THIS STANDARD IS BASED ENTIRELY ON THE USE OF STANDARD FACTORY LOADED AMMUNITIONS ONLY, AND EXCLUDES SPECIAL PURPOSE, COATED, STEEL JACKETED OR OTHER ARMOUR PIERCING ROUNDS.

LEVEL III (CERAMIC PLATES WITH LEVEL II SOFT BALLISTIC PANELS)

BULLET TYPE	MASS	VELOCITY
5,56 mm x 45 mm NATO BALL LEAD CORE (R4, R5)	55 gr	955 m/s
7,62 mm x 39 mm BALL MILD STEEL CORE (AK47)	123 gr	710 m/s
7,62 mm x 51 mm NATO BALL LEAD CORE (R1)	143 gr	862 m/s
7,62 mm x 39 mm API (AK47)	120 gr	725 m/s

AND ALL LESSER THREATS

The body armour may be worn with or without one or both hard ceramic plates, depending on the task to be performed.

3. **WARNING:**

3.1 DO NOT attempt to prove the effectiveness of the body armour.

3.2 Always remember that the body armour will only protect the part of the body which it covers.

3.3 Wearing the body armour will not make you immune to injury.

3.4 Treat and handle this equipment with extreme care and respect.

3.5 Your best protection is CAUTION.

3.6 **BLUNT TRAUMA:** While the correct level of protection will prevent a bullet from penetrating the body, the tissue surrounding the impact point receives a hammerlike blow that may cause bruising and lacerations.

3.7 The covered multicurved plate shall be capable of stopping ammunition types specified for ceramic plates in para 2.3, provided shots do not superimpose on previous shots and are fair shots. A fair shot is defined as not nearer than 50mm from an edge, and not closer than 100mm from each other (measurement from centre of point of impact).

4. **WEARING INSTRUCTIONS:**

4.1 The hard ceramic plates must be inserted with the curve of the plates aligning with the body. Make sure that the plates are secured correctly.

4.2 When not in use the body armour is to be stored in the carry bag, away from heat sources, direct sunlight or damp conditions.

5. **CLEANING INSTRUCTIONS:**

5.1 Remove the soft ballistic panels from the outer garment.

5.2. The outer garment can be hand or machine washed at medium settings.

5.3 Allow to air dry.

5.4 The soft ballistic panels can be cleaned with a damp cloth. Merely wipe clean. Refer to instructions on the panels.

5.5 DO NOT Dry clean any part of this garment.

5.6 Always ensure that the velcro fastenings are kept clean and free of dirt.

6. **REPLACEMENT:**

6.1 Exchange your body armour at the stores if:

a) Outer cover is torn or damaged.

b) Side or shoulder straps are damaged.

c) Ballistic panel waterproof coverings are torn or damaged.

d) Hard ceramic plates are cracked or damaged.

7. **INDEMNITY:**

If not used correctly the manufacturer and purchasing authority shall not be responsible for any death, injury or damages suffered by the wearer of this equipment.

Formatt 011-452-7070 (ALL 0006 002)

MOCHOCHONONO PROTECTIONS

LIGHTWEIGHT ARMOUR SYSTEMS

Made in SOUTH AFRICA

USER'S MANUAL

READ THESE INSTRUCTIONS CAREFULLY - THIS ARMOUR MAY SAVE YOUR LIFE!

MODEL: SAPS G.P.V.
VEST, BULLET RESISTANT

YEAR OF MANUFACTURE: 2008

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

CONSEALED VEST

Table 17 – Concealed vest outer material requirements

1 **Property**	2 **Requirement**	3 **SANS number** (unless otherwise indicated)
Fibre composition, %, ...	All polyamide	AATCC method 20
Weave	Rip stop	Visual examination and physical analysis
Width, mm, min.	150	81
Mass per area, g/m2, min.	98	79
Number of threads per cm, min.		7211-2
Warp	50	
Weft	28	
Tensile strength, N, min.		13934-1
Warp	700	
Weft	500	
Tearing strength, N, min.		
Warp	20	
Weft	20	
Seam slippage at 5 cm, N, min.		5486
Warp.....	200	
Weft.....	200	
Dimensional changes washing at 40 ºC, %		11167
Warp.....	± 3	
Weft.....	± 3	
Abrasion resistance, Number of rubs, min	20 000 No breaks	6009
Colour fastness to:		
Washing, rating, min.		105-C10
Change in colour.....	4	test C(3)
Staining.....	4	
Perspiration, rating, min.		105-E04
Change in colour.....	4	
Staining.....	4	
Light, rating, min	4	105-B02

a Ripstop to incorporate squares of 4 mm x 4 mm (± 2 mm)
b Washing procedure F4, IEC test detergent, drying procedure E.

Table 18 – Concealed vest lining requirements

1 **Property**	2 **Requirement**	3 **SANS number (unless otherwise indicated)**
Fibre composition, %, ...	All polyester	AATCC method 20
Mass per area, g/m2, range.		79
Dimensional changes washing at 40 ºC, %	120 to 172	11167a
Warp	± 3	
Weft	± 3	
Colour fastness to:		
Washing, rating, min.		105-C10
Change in colour	4	test C(3)
Staining	4	
Perspiration, rating, min.		105-E04
Change in colour	4	
Staining	4	
Light, rating, min.	4	105-B02
a Washing procedure F4, IEC test detergent, drying procedure E.		

Table 19 – Concealed vest webbing requirements

1 **Property**	2 **Requirement**	3 **SANS number** (unless otherwise indicated)
Composition, %	All continuous filament polyester	AATCC 20
Selvedge	Lockstitch	Physical analysis
Width, mm	47 ± 1	5488
Thickness, mm	1.10 ± 0.10	85
Breaking strength, min. KN	26.0	13934-1

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

Table 20 – Item Control Numbers for fully assembled concealed body armour ensembles
NOTE: The Item Control Numbers below shall be displayed on the outside label of the carry bag.

1	2	3
Item Control Number	**Item description**	**Size**
8470T05018655	Vest, Bullet Resistant, Concealed, Male, Size Small (New Type)	S
8470T05018656	Vest, Bullet Resistant, Concealed, Male, Size Medium (New Type)	M
8470T05018657	Vest, Bullet Resistant, Concealed, Male, Size Large (New Type)	L
8470T05018658	Vest, Bullet Resistant, Concealed, Male, Size XL (New Type)	XL
8465T05042395	Vest, Bullet Resistant, Concealed, Male, Size XXL (New Type)	XXL
8465T05042396	Vest, Bullet Resistant, Concealed, Male, Size XXXL (New Type)	XXXL
8465T05042397	Vest, Bullet Resistant, Concealed, Male, Size 4XL (New Type)	4XL
8465T05042398	Vest, Bullet Resistant, Concealed, Male, Size 5XL (New Type)	5XL

Table 21 - Item Control Numbers for outer jacket only (applicable to both front and back outer jacket)

1	2	3
Item Control Number	**Item description**	**Size**
8470T05042400	Vest, Bullet Resistant, Outer, Concealed, Male, Size Small (New Type)	S
8470T05042401	Vest, Bullet Resistant, Outer, Concealed, Male, Size Medium (New Type)	M
8470T05042402	Vest, Bullet Resistant, Outer, Concealed, Male, Size Large (New Type)	L
8470T05042403	Vest, Bullet Resistant, Outer, Concealed, Male, Size XL (New Type)	XL
8470T05042404	Vest, Bullet Resistant, Outer, Concealed, Male, Size XXL (New Type)	XXL
8470T05042405	Vest, Bullet Resistant, Outer, Concealed, Male Size XXXL (New Type)	XXXL
8470T05042406	Vest, Bullet Resistant, Outer, Concealed, Male, Size 4XL (New Type)	4XL
8470T05042407	Vest, Bullet Resistant, Outer, Concealed, Male, Size 5XL (New Type)	5XL

Table 22 – Dimensions of the concealed vest front panel of the inner soft ballistic panel

1	2	3	4	5	6
Size designation	**NOMINAL FINISHED GARMENT MEASUREMENTS, CM**				
	Bottom width	**Front length**	**Across body**	**Neck drop**	**Top width**
Small (87 – 92)	46	42	36	8	30
Medium (97 – 102)	51	43	38	8	31
Large (107 – 112)	55	45	40	8	32
X-Large (117 – 122)	61	46.5	42	8	33
2X-Large (127 – 132)	66	48	44	8	34
3X-Large (137 – 142)	71	49.5	46	8	35
4X-Large (147 – 152)	76	51	48	8	36
5X-Large (157 – 162)	81	52.5	50	8	37
1 Based on the chest circumference of the wearer in centimetres					

Table 23 – Dimensions of the concealed vest back panel of the inner soft ballistic panel

1	2	3	4	5
Size dimensions	**Nominal garment measurement, cm**			
	Bottom width	**Back length**	**Depth of scye**	**Top width**
Small (87 – 92)	46	40	27	30
Medium (97 – 102)	51	41.5	28	31
Large (107 – 112)	56	43	29	32
X-Large (117 – 122)	61	44.5	30	33
2X-Large (127 – 132)	66	46	31	34
3X-Large (137 – 142)	71	47.5	32	35
4X-Large (147 – 152)	76	49	33	36
5X-Large (157 – 126)	81	50.5	34	37

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

Table 24

Measuring points of concealed outer jacket

MEASURING POINT		DESCRIPTION
A – A	**Front width**	Measure across the front at the widest point, from the one side seam to the other.
B – B	**Front length**	Measure from the neck point to the bottom edge of the front panel.
C – C	**Back width**	Measure across the back at the base of the scye from the one side seam to the other.
D – D	**Back length**	Measure from the centre back neck point to the bottom edge of the back panel.
D – E	**Depth of scye**	Measure from the centre back neck to a point level with the base of the scye.

Table 25 – Dimensions of the concealed front panel and back panel of the outer jacket

1	2	3	4	5	6
Size designation1	**Nominal finished garment measurements, cm**				
	Front width	**Front length**	**Back width**	**Back length**	**Depth of scye**
Small (87 – 92)	48	44	48	42	28
Medium (97 – 102)	53	45.5	53	43.5	29
Large (107 – 112)	58	47	58	45	30
X-Large (117 – 122)	63	48.5	63	46.5	31
2X-Large (127 – 132)	68	50	68	48	32
3X-Large (137 – 142)	73	51.5	73	49.5	33
4X-Large (147 – 152)	78	53	78	51	34
5X-Large (157 – 162)	83	54.5	83	52.5	35
1 Based on the chest circumference of the wearer in centimetres					

Table 26 – Torso strap sizes

Size	Length
S	170 mm
M	200 mm
L	230 mm
XL	260 mm
XXL	290 mm
XXXL	320 mm
4XL	350 mm
5XL	370 mm

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

QUALITY ASSURANCE PROVISION BY THE SUCCESSFUL BIDDER

1. GENERAL

The Acceptance Authority shall be specified in the contract.

2. QUALITY CONFORMANCE INSPECTION

Certificate of Compliance (COC)

The contractor manufacturing the Body Armour shall provide evidence that the product being supplied complies with the requirements of the specification. All raw materials being used in the making of these garments shall be supplied with a by a **trim chart and a certificate of compliance**, accompanied by the relevant test results. These documents shall be submitted to the SAPS at the time of inspection and the SAPS reserves the right to verify and check the test results of such items at the expense of the contractor to determine the validity of the certification.

The COC shall include the following information:

- ✓ Yarn batch number from the original manufacturer
- ✓ Textile material type
- ✓ Date received
- ✓ Weaver details
- ✓ Manufacturer details
- ✓ Testing date
- ✓ Testing standards
- ✓ Results of tests conducted

Responsibility for Inspection

Unless otherwise specified in the contract or purchase order, the contractor shall be responsible for the performance of all inspection requirements as specified herein. The contractor shall use his own or any other facilities within the RSA suitable for the performance of the inspection requirements specified herein, unless not approved by the SAPS or otherwise specified in the contract or purchase order.
The SAPS reserves the right to perform any of the inspections as deemed necessary to assure supplies and services conform to prescribed requirements.

Responsibility for Compliance

The contractor shall have in operation an integrated quality management system which shall assure that all items supplied in accordance with this specification, comply with it in all respects. The inspection and test requirements specified in this document shall also form part of this contractor quality management system. The Procurement Authority shall have the right to call for periodic audits of the contractor's management of quality. The contractor shall have in operation an integrated Quality System based on ISO 9002 and the inspection and test requirement specified in this document shall form part of the contractor's system.

Classification of Inspection

The inspection requirements specified herein are classified as follows:

- Pre-production sample inspection
- In-process quality conformance inspection

Pre-production Sample Inspection

See Annex I.

In-process Quality Conformance Inspection

The contractor shall submit to SAPS Logistics an integrated quality plan which specifies the process to be followed during the manufacture, with applicable hold points for verification of components during the make-up process to ensure compliance with the specified requirements. The Acceptance Authority 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 Body Armour supplied to this specification may be in process.

Inspection Lots

The maximum lot size for acceptance shall not exceed 100 Body Armours, for either front or back ballistic panels or hard armour plates.

QUALIFICTION PROCESS

Hard Armour Plates

A sample shall be selected from every 100 plates being presented for release and will constitute a test batch. Should this sample be successful, the batch will be accepted. In the event of a failure, an additional two samples shall be selected from the same test batch for re-testing. If one of the additional samples fails, the test batch of hard armour plates will be rejected. Should both samples be successful, the test batch will be accepted.

Ballistic Panels

One panel shall be taken for every 100 garments being manufactured. The contractor shall be responsible for ensuring that enough panels are tested to represent one panel for every 100 garments manufactured. The contractor shall only supply the sealed ballistic panels and not the outer garment for qualification.. Should the test be successful, the lot/batch of material will be accepted. In the event of a failure, an additional two samples will be selected from the same lot/batch. If one of the additional samples fails, the lot/batch of material will be rejected, Should both samples be successful, the lot/batch of material will be accepted.

Lower and Higher Velocities

Lower velocities: Should velocities be under the required minimum velocity, the average will be calculated for this particular test. Should the average fall below the minimum specified requirement, the test must be repeated. Higher velocities: Should velocities in a particular test be higher than the maximum required velocity and a penetration occur, the test must be repeated.

Section 14 prevails for the normal failures.

Sampling process

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

A sample will be selected from a delivery lot/batch being presented for release. Ballistic test results shall be available for that sample.

Qualification standards

SANS 1658:2007/ NIJ 0101.04 shall be applicable for testing of soft ballistic units.
SANS 1658: 2007/ NIJ 0101.04 shall be applicable for testing method of hard ballistic plates.

Calibration of Test Equipment

The contractor shall have in his possession, all the applicable test equipment t conduct the necessary test. The contractor shall be responsible to proof to the Acceptance Authority/SAPS before any testing commence, that the test equipment has been calibrated. An updated calibration certificate must be available. The calibration certificate must be issued by an accredited institution.
None of the defects listed in Table 18 shall be allowed/accepted.

GENERAL

- Unless otherwise stated, the SAPS (or an organization deputed by it) shall be the inspecting authority.
- One complete (BRV) pre-production sample in size LARGE, shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced. The sample shall comply with the specification in all respects.
- This sample shall be accompanied by a trim chart containing a sample of each component material (as given in 6) and the relevant certificates. It shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples.
- In the event of less than 100 body armours being ordered, provision shall be made for an additional sample for qualification purposes.
- The body armour 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 body armour supplied to this specification may be in progress.
- The contractor shall inspect the finished body armour for compliance with the specification before submitting them to the inspecting authority for final inspection.
- Before acceptance, the body armour shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.
- A sample will be selected from a delivery lot/batch being presented for release. Ballistic test results shall be available for that sample. Should this sample be successful, the lot/batch acceptance shall take place. In the event of a failure, an additional two samples shall be taken from the same lot/batch. If one of the additional samples fails, the lot/batch will be rejected, Should both samples be successful, the lot/batch will be accepted. Sample sizes shall be determined by the SAPS and Inspection Authority.
- The contractor shall also be responsible for proving a marksman for the duration of testing as well as all testing facilities and the test weapon may be a handgun, rifle or test barrel chambered as appropriate for the test bullet required by the type or armour that is being tested. The test facility and all relevant test equipment shall be acceptable to the SAPS and the Inspection Authority.

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

- The SAPS, SABS and or inspection authority Quality reserves the right to perform any of the inspections as deemed necessary to assure supplies and services conform to prescribed requirements.
- DOCUMENTATION One container of each consignment shall be marked “DOCUMENTS” and in addition to the body armour, shall contain the following: a) The packaging slip or delivery note; b) Where applicable the inspection certificate(s); c) A copy of the invoice containing the following information: - the order number;

QUALITY INSPECTION (APPLICABLE TO THE SUCCESSFUL BIDDER), AS CLEARLY STATED IN THE SPECIFICATION ABOVE

General

Unless otherwise stated, Armscor Quality Assurance shall be the inspecting authority for the CMT, the inner panels and ballistic qualifications.

Three pre-production samples body armour of each size, shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced. Each one of these samples shall be accompanied by a trim chart containing a sample of each component material (as given in 7) and the relevant certificates. It shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples.

The body armour 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 the body armour supplied to this specification may be in progress.

The contractor shall inspect the finished body armour for compliance with the specification before submitting them to the inspecting authority for final inspection.

Before acceptance, the body armour shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.

A sample will be selected from a delivery lot/batch being presented for release. Ballistic test results shall be available for that sample. Should this sample be successful, the lot/batch acceptance shall take place. In the event of a failure, an additional two samples shall be taken from the same lot/batch. If one of the additional samples fails, the lot/batch will be rejected. Should both samples be successful, the lot/batch will be accepted. Sample sizes shall be determined by the SAPS and Armscor Quality.

The contractor shall also be responsible for providing a marksman for the duration of testing as well as all testing facilities and the test weapon may be a handgun, rifle or test barrel chambered as appropriate for the test bullet required by the type or armour that is being tested. The test facility and all relevant test equipment shall be acceptable to the SAPS and Armscor Quality Assurance.

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF BODY ARMOUR: MALE BULLET RESISTANT (BEIGE) FOR THE SOUTH AFRICAN POLICE SERVICE SAPS

SPEC NUMBER: 00000/2024

The SAPS, SABS, Armscor Quality Assurance reserves the right to perform any of the inspections as deemed necessary to assure supplies and services conform to prescribed requirements.

DOCUMENTATION (as mentioned in the specification above)

One container of each consignment shall be marked "DOCUMENTS" and shall, in addition to dresses, contain the following:

- ♦ The packing slip / delivery note
- ♦ Where applicable, the inspection certificate(s)
- ♦ A copy of the invoice containing the following
- The order number
- The financial authority number
- A full description of the consignment, i.e. items, quantity, sizes, etc

Deviation from specification requirements	
Indicate which paragraph	Should the bidder deviate from any of the technical requirements within the specification, must it be clearly indicated as such below. The SAPS has the right to accept or to reject the alternative offer/deviation indicated by the bidder.