



MINISTRY OF DEFENSE
BRAZILIAN ARMY
CABINET OF COMMANDER
BRAZILIAN ARMY COMMISSION IN WASHINGTON

REQUEST FOR INFORMATION (RFI)

Terms and Conditions
(For planning purposes only)

RFI-0009/2023

Issue Date: **March 17, 2023**

1. OBJECT

This request is for a budgetary quotation for **newly-manufactured Camouflage Body Armor, Level III**, as described in the enclosed Table 1 – List of Materials/Services. The technical specifications of all attachments, if any, must be complied with. Please read all instructions below.

Note(s):

- a. All communications regarding this RFI must be done in English language. Inquiries in any other language than English will not be considered.
- b. If any product brand names or models are shown in any attachments, they are for reference only. You can offer similar products, but you must include their brand names and models in your proposal. You must additionally submit their complete and accurate technical specifications in order to allow for their accurate evaluation.
- c. If the items in Table 1 – List of Materials/Services are described only by their technical specifications, you must indicate the brand names and models of the products you are offering and submit their complete and detailed technical specifications (brochure, catalog, CD-ROM, etc.) in order to allow for their accurate evaluation.
- d. **SUBMISSION OF PROPOSALS MUST BE DONE IN THE BAC'S INTERNATIONAL CONTRACT SYSTEM FILLING OUT ALL FIELDS. TO ATTACH ANY DOCUMENT IN THE SYSTEM USE THE "DOCUMENT" TAB. USE MOZILA FIREFOX TO AVOID ERRORS. SAVE THE NEW WEB ADDRESS IN YOUR BROWSER:**

<https://dakota.cebw.org/cebwWeb>

IMPORTANT – Please see instructions under the menu **HELP** on how to fill out a quotation in BAC's International Contract System.

2. ACCEPTANCE OF TERMS AND CONDITIONS

- a. The **SUPPLIER's** submission of a **budgetary quotation** will indicate **your acceptance** of all terms and conditions written in this RFI.

- b. The Brazilian Army Commission (BAC) reserves the right to reject anytime, totally or partially, any **budgetary quotation** that does not comply with the technical specifications and/or terms and conditions of this RFI.
- c. According to International Laws, based on "*locus regit actum*" Principle and in order to protect the **SUPPLIER's** intellectual proprietary information, BAC will not disclose, except to its personnel and advisors, any data, specifications or technical documentation regarding the **SUPPLIER's** budgetary quotation that are not known to the general public.
- d. The cost of preparing and submitting a budgetary quotation is the sole responsibility of the company; under no circumstance will the BAC be responsible for these costs.

3. SUPPLIER REGISTRATION AND PARTICIPATION

- a. In order to participate in future bidding processes, companies must be duly registered in the BAC Suppliers Database, with all required documents on file and all data updated.
- b. The Brazilian Army Commission (BAC) is constantly updating its Suppliers Database, and companies receiving this RFI are currently pre-registered or registered. However, if it has been more than six months since a company has done business with the BAC or has been invited to quote in an RFI, that company should log in to BAC's International Contracts System (<https://dakota.cebw.org/cebwWeb/>) and update its information as necessary.
- c. If your company has received this RFI but has not yet completed the registration process, the company should send an email to registration@cebw.eb.mil.br requesting a **user name** and **password**. The company will then be able to update its information into the Suppliers Database, and will be required to submit a few documents by email in order to complete the registration process
- d. The **SUPPLIER** is responsible for maintaining the confidentiality of its password and is fully responsible for all activities that occur in its account, including any transaction executed directly by the **SUPPLIER** or its representative. The **SUPPLIER** agrees to immediately notify the BAC of any unauthorized use of the **SUPPLIER's** password or any other breach of security. The BAC is not liable for any loss or damage arising from the **SUPPLIER's** failure to comply with this clause.
- e. **Note(s):** The following businesses, companies, or individuals will not be allowed to participate in the bidding process or contract execution, directly or indirectly, in special:
 - 1) A Public Agent from (i) the institution/organization promoting the bidding process or (ii) contracting agency;
 - 2) An Individual or legal entity (company), who is the author of: (i) the preliminary project, or (ii) the basic project or (iii) the executive project, when the bidding deals with public works, services or supply of goods related thereto;
 - 3) The company, alone or in a consortium, responsible for the preparation of: (i) the basic project, or (ii) the executive project, or (iii) company of which the author of the project is a: (a) director, (b) manager, (c) controller, (d) shareholder or (e) holder of more than 5% (five percent) of the voting capital, (f) responsible technical person or (g) subcontractor, when the bidding deals with public works, services or supply of goods necessary for it;
 - 4) An individual or company who is, at the time of the bidding process, unable to participate in the bidding as a result of sanction imposed on it; and



- 5) An individual or company, who maintains a link of: (i) technical nature. (ii) commercial, (iii) economic, (iv) financial, (v) labor or (vi) civil service, with the head of the organization or contracting entity or with a public agent who play a role in the bidding process or act in the inspection or management of the contract, or who are spouse, partner or relative in a direct, collateral or affinity line, up to the third degree, and this prohibition is expressly stated in the bidding document.

4. BUDGETARY QUOTATION DEADLINE

- a. The deadline for submitting a budgetary quotation is **April 25, 2023 at 23:59h PM**, United States Eastern time.
- b. Your **budgetary quotation** must be entered and submitted directly online in the BAC's International Contracts System and/or by email to the address procurement@cebw.eb.mil.br. The reference **RFI-0009/2023** must be included in the subject line of your email.
- c. If also submitting your budgetary quotation by mail, it should be in an envelope addressed as follows:

BRAZILIAN ARMY COMMISSION
PROCUREMENT DIVISION
4632 Wisconsin Avenue, NW
Washington, DC, USA - 20016-4622
REF: **RFI-0009/2023**

5. VALIDITY

The budgetary quotations must be valid for a period of at least **180 (one hundred eighty) days** from the date the budgetary quotation is submitted to the BAC.

6. PRODUCTS AND PRICES

6.1 Price for Product Goods

Your company is requested to submit a **Budgetary Quotation for Product Goods at the Seller's Warehouse (FCA Origin, Incoterms 2020, ICC Publication No. 723E)**. Please refer to the attached Table 1 – List of Materials/Services and Attachments, if any.

6.2 General Conditions

- a. Considering that the Brazilian Army utilizes resources from different accounts, the **SUPPLIER** is requested to quote prices separately for each **product goods and estimated delivery costs**, as listed in the attached Table 1 – List of Materials/Services.
- b. Prices for **product goods** must be firm and fixed and shall be preferably quoted in United States Dollars (USD). Please do not include the estimate delivery charges in the goods price.

- c. Prices for **delivery costs**, if applicable, shall be an **estimate only** and preferably quoted in United States Dollars (USD), separately.
- d. Quotes may be submitted in other currencies, but prices will be always evaluated in US Dollars. The BAC will use the exchange rate published in the Internet site of the *Wall Street Journal* (<https://www.wsj.com/market-data/currencies/exchangerates>).
- e. Prices must be exempt from sales taxes, since the goods are to be exported to Brazil.
- f. Prices must be exempt from Brazil's Industrialized Product Tax (IPI - Imposto sobre Produtos Industrializados) and Importation Tax (II - Imposto sobre Importação), as per terms of Art. 1, Section VIII, of Law No. 8.402 of January 8, 1992, and Art. 2, Section I, and Art. 3, Section I, of Law No. 8.032 of April 12, 1990.

7. TERMS OF PAYMENT

- a. **Advanced payments are not allowed.**
- b. Payment will be made by the **BUYER** to the **SUPPLIER** after delivery of the Defense Materiel, as defined in the Contract. Payment may be made against invoice (through Wire Transfer). The invoice shall provide for a period of 30 (thirty) days, from date of delivery, for the corresponding payment. For wire transfer purposes, the bank name and address, ABA, IBAN, BIC code, Swift Code, account name and account number must be included in the invoice.
- c. Payment can be made through an Irrevocable Letter of Credit (ILC) issued by Banco do Brasil, in the United States. **This option is only available for awarded contracts over USD 200,000.00 (two hundred thousand US Dollars). If the SUPPLIER requests payment through letter of credit, it must pay all expenses with the Banco do Brasil (issuing bank) and any advising/confirming bank.**
- d. All documents required for payment will be listed in the contract, in the event that a contract is awarded in a future RFQ.

8. FINANCIAL GUARANTEE

- a. In order to guarantee **SELLER's** full contractual performance, depending on the value of a contract, the **BUYER** may request **SELLER** to present a **Performance Bond** (Financial Guarantee) as described below.
- b. The **SELLER's** full performance of all its contractual obligations, including payment of any liquidated damages for failure to perform those obligations, will be guaranteed by the provision of a **Performance Bond**, in the amount of 5% (five percent) of the maximum value of the Contract. The **Performance Bond** must remain valid until at least 90 (ninety) days after the issuance of the Definitive Receiving Certificate (DRC).
- c. The **Performance Bond** will be executed, in form and substance acceptable to **BUYER**, for reimbursement to the **BUYER** as payment for damages resulting from any failure by the **SELLER's** to perform its contractual obligations. This includes but is not limited to failure to:



- 1) complete delivery of the object by the final delivery date established in the Contract.
 - 2) resolve, within 30 (thirty) days of receiving notice from the **BUYER**, any problem reported by the **BUYER** involving defects or shortages in the Defense Material, as well as any non-conformity with the requirements of the Contract.
- d. Should the delivery date be extended, the **Performance Bond** will also be extended.

9. TECHNICAL LITERATURE

- a. The **SELLER** shall provide all technical documentation (operator/user manuals, maintenance manuals, technical data sheets, etc.) pertaining to the actual contracted items in Portuguese, Spanish or English, in this order of preference.

10. CATALOGUING DATA

- a. The **SELLER** shall provide, at least 30 days before the delivery/shipment of the goods:
- 1) For Items already catalogued – provide the NATO Stock Number (NSN), and/or
 - 2) For Items not yet catalogued – provide all Technical and Management Data necessary for cataloguing said items according to the NATO Cataloguing System.

11. DELIVERY AND INSURANCE OF PRODUCT GOODS

- a. The Defense Materiel shall be preferably delivered in a **single shipment**, within a period of **180 (one hundred and eighty)** days from the date of the Contract signing. If multiple shipments will be required for delivery, this must be indicated in the budgetary quotation.
- b. **The use of any courier service (DHL, UPS, FedEx, etc.) for shipment directly to Brazil is strictly prohibited.**
- c. Items which are subject to export licenses shall not be shipped until the license is granted.
- d. The **SELLER** must deliver the Defense Materiel packaged, packed, crated, labeled, and repacked (when applicable) in accordance with the highest standards for international transportation (not merely common carrier requirements) as well as the **International Air Transport Association (IATA) regulations** to ensure its safe arrival at its final destination. If the material is considered **dangerous goods** the cargo must be properly packed for shipment on Passenger aircraft (PAX) if the UN number allows this. If the material is considered for shipment on Cargo aircraft only (CAO) then material must be packed according to those regulations. In case that the Defense Materiel includes batteries, the **SELLER** must be responsible for any additional expense related to battery cycling, discharging and/or recharging, and for dangerous goods repacking and labeling. **IMPORTANT: The shipment cannot be consolidated with any other cargo**
- e. Concerning wood packaging materials (including dunnage) used in international trade, in order to comply with the International Standard for Phytosanitary Measures (ISPM15), **SELLER** will be required to include on the Bill of Lading (BL) and/or Air Waybill (AWB) and also to provide, if necessary, a Packing Certificate/Declaration stating:

- 1) Wood is being used: Yes or No.

- 2) Type of wood: Not applicable, no wood used.
 Yes, processed wood.
 Yes, treated/certified (*).
 Yes, not treated/not certified.
- 3) Type of treatment (*): HT, Heat Treated
 DH, Dielectric Heated
 MB, Methyl Bromide.

- f. If the wooden pallets/boxes used for the cargo originated in China, Japan, South Korea, Taiwan or Hong Kong, the wood must be fumigated and a certificate provided. If the wooden pallets/boxes (i) originated from countries that have adopted the International Standard for Phytosanitary Measures (ISPM-15), (ii) have been treated and identified with the mark IPPC (International Plant Protection Convention), these wooden pallets/boxes will be accepted as certified after inspection to be internalized in Brazil. Types of wood (not treated, not certified) are not accepted by the Brazilian authorities. If the wood materials are not properly marked with the IPPC standard and/or certified, the Brazilian authorities may not approve the import and the cargo will be rejected and sent back to the point of origin.
- g. INCOTERMS 2020: CIF Port of Rio de Janeiro, RJ - Brazil

Note: Incoterms will be defined in the event that BAC runs a future formal RFQ and awards a contract.

- h. **Estimated freight delivery costs: USD _____.**
The freight costs must be an estimate only. In the event that a contract is awarded to your company, the BAC will pay only the actual costs (which cannot exceed the above estimate) upon presentation of corroborating documents from the freight forwarder and carrier.
- i. **Estimated cargo insurance costs: USD _____.**
The estimated cargo insurance costs for 110% of the material value and freight delivery costs shall cover "All Risks". The cargo insurance costs must be an estimate only. In the event that a contract is awarded to your company, the BAC will pay only the actual costs (which cannot exceed the above estimate) upon presentation of corroborating documents from the insurance company.
- j. The goods shall preferably be shipped via a **vessel of Brazilian registry**, "Freight Prepaid", if available in the country at the time of shipment; otherwise, the **SELLER** is allowed to ship using a vessel of another registry. The shipment cannot be consolidated with another cargo. The Ocean Bill of Lading (B/L) must also show the actual ocean freight charges declared by the carrier. When submitting your proposal, please indicate the name of the carrier.
- k. For direct shipment to Brazil, notwithstanding the provisions of INCOTERMS 2020, ICC Publication No. 723E, if the Defense Material cannot be cleared through customs by the Brazilian Army and has to be kept in storage by customs authorities due to negligence on the part of the **SELLER** related to the shipping documentation, any storage charges will be the responsibility of the **SELLER**.

12. EXPORT LICENSE

- a. In accordance with INCOTERMS 2020, ICC Publication No. 723E, the **SELLER** shall obtain at its own risk and expense any export license or other official authorization and carry out, where applicable,

all customs formalities necessary for the export of the product goods to Brazil. The BAC will not pay any costs for export license application.

- b. If an export license is required, the **SELLER must** notify the BAC in its budgetary quotation in order to obtain an official **End-User Certificate (EUC)**.
- c. If an export license is not required, the **SELLER must** state this in its budgetary quotation.

13. WARRANTY

- a. The **SELLER** must provide a 7 (seven) years warranty, in form and substance acceptable to BAC, for products, parts and accessories sold by the **SELLER**, under which the **SELLER** warrants that all Defense Materiel (and its constituent items) supplied to the **BUYER** shall:
 - 1) Be free from defects in material in workmanship;
 - 2) Be manufactured in strict conformance with the **SELLER's** specification for the production of such material;
 - 3) Be factory new;
 - 4) Be not remanufactured, refurbished, reworked, modified, or have been previously delivered by the **SELLER** to any other customer.
- b. The warranty must begin upon the issuance of the **Definitive Receiving Certificate** or three months after customs clearance of the Defense Material (whichever occurs first).

14. OTHER PROVISIONS

None attached.

15. APPLICABLE LAW

- a. The parties shall endeavor to amicably solve any differences that might arise during the execution and interpretation of any Contract. The attempt to reach an amicable settlement will be considered to have failed when one party notifies the other, in writing, of its non-acceptance of the other party's proposed solution and its wish to end negotiations.
- b. All claims between the parties based upon any alleged breach of any substantive obligations created during the execution of the awarded Contract will be finally settled by the US District Court for the District of Columbia or the Superior Court of the District of Columbia. Unless otherwise directed by the **BUYER**, pending the final disposition of any dispute hereunder, the **SELLER** must proceed diligently to perform the Contract, including delivery of the Defense Materiel/services in accordance with the **BUYER's** instructions, provided that the **BUYER** pays the **SELLER** amounts due in accordance with the Contract, subject to adjustment based on final disposition of the dispute.
- c. The U.N. Convention on Contracts for the International Sale of Goods will not apply to the awarded contract. Since the **BUYER** is domiciled in the District of Columbia, the Contract, and any and all disputes arising thereunder or in connection with the process of awarding said Contract, will be governed, construed, interpreted and applied in accordance with the laws of the District of Columbia, without reference to its choice of law rules or to the constructive change doctrine. For all purposes in connection with any action or proceeding that arises from or relates to the contract, the **SELLER** irrevocably consents, for enforcement of such clause, to the personal jurisdiction of the US District



Court for the District of Columbia or the Superior Court of the District of Columbia for any matter arising out in the dispute. The **SELLER** irrevocably waives any objection (including forum non conveniens) to such proceedings.

16. PENALTIES

- a. The **SUPPLIER** will be subject to penalties, guaranteed the previous defense, if it does not fully comply with the Terms and Conditions outlined in the future RFQ and **associated Contracts**. The following penalties may be applied by **BUYER**, but application of such penalties does not excuse **SUPPLIER** from any and all civil and criminal liability, including compensating **BUYER** for damages and losses suffered, and to any and all remedies available to **BUYER** under applicable law.
 - 1) **Advertency**, the **BUYER** will issue a formal letter to **SELLER** notifying of its contractual obligations.
 - 2) **Fine**, to be paid within 15 (fifteen) days from receiving an official communication regarding the following hypothesis:
 - a) 0,01% (one hundredth of one percent) per day of unjustified delay in delivering the Defense Materiel/Services, up to a maximum of 5% (five percent) of the total price of the undelivered Defense Materiel/Services of the Contract.
 - b) Up to 5% (five percent) of the total price of the Defense Materiel/Services of the Contract, for noncompliance with the terms of the Contract.
 - 3) **Temporary suspension**, for a period of up to **five (05) years**, from participating in acquisitions and bidding processes from the Brazilian Army Commission, for the **SUPPLIER** that:
 - a) do not sign the Contract.
 - b) present false/counterfeited documentation.
 - c) inexcusable delay in the execution/performance of the object of the Contract.
 - d) do not honor its offered proposal or violate the execution/performance of the Contract.
 - e) behaves on a disreputable manner or commits fiscal fraud.
 - 4) A **Declaration of Disreputable Status**, that holds the **SUPPLIER** unfit to bid or contract with the Brazilian Army Commission, for as long as the reasons that motivated the application of such the penalty remains or until the **SUPPLIER** is rehabilitated by the authority that applied the penalty.
- b. The value of the fine, applied after proper administrative process, may be discounted from eventual due payments and/or invoiced for **SUPPLIER**'s payment, plus late penalty charges of 1% (one percent) interest per month, but no more than 5% of the Contract value.
- c. The penalties provided on this clause's first paragraph, points "1)", "3)" and "4)", may be applied, cumulatively or not, with the penalty mentioned in point "2)".
- d. The **SUPPLIER** may appeal to the **BUYER** to reconsider it within a maximum of 10 (ten) business days from receiving the formal **BUYER**'s **Notice of Penalty Application**. The **BUYER** shall have 10 (ten) business days to respond to the **SUPPLIER**'s appeal.



17. ATTACHMENTS

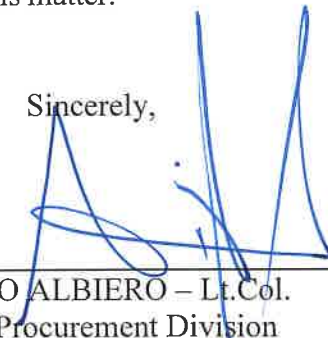
- a. Annex A - Table 1 – List of Materials/Services
- b. Annex B - Technical Specifications

18. POINT OF CONTACT:

Any questions regarding this RFI may be directed to Ricardo Palhano, email ricardo@cebw.eb.mil.br, and/or Aline Cole, email aline@cebw.eb.mil.br.

Thank you very much for your attention in this matter.

Sincerely,



MURILO ALBIERO – Lt.Col.
Chief, Procurement Division

**MINISTRY OF DEFENSE
BRAZILIAN ARMY COMMISSION
PROCUREMENT DIVISION**

Phone: (202) 244-5010

Fax: (202) 895-6395

**Table 1 - List of Materials/Services
REQUEST FOR INFORMATION**

RFI-0009/2023

Closing Apr 25, 2023

Item	P/N	NSN	Item	Qty	Unit	Unit Price USD	Total Price USD
1			Camouflage Body Armor Ballistic Protection Level III - Size: Medium AS PER ATTACHED TECHNICAL SPECIFICATIONS	6400	UN		
2			Camouflage body armor ballistic protection level III - Size, LARGE	4000	UN		
3			Camouflage Body Armor Ballistic Protection Level III Size: X Large. AS PER ATTACHED TECHNICAL SPECIFICATIONS	3000	UN		
Sub-Total							
Estimated Freight Charges () USA domestic () Airport Rio de Janeiro - Brazil () Port of Sepetiba, RJ - Brazil							
Estimated Cargo Insurance Charges							
Total (Incoterms: _____)							
Currency							



Table 1 - List of Materials/Services
REQUEST FOR INFORMATION

RFI-0009/2023

Closing Apr 25, 2023

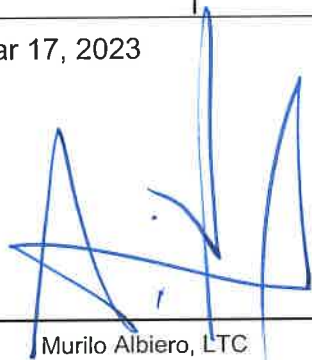
OTHER REQUIREMENTS

Seller's Quotation Number		Seller's CAGE code(if available)	
Quotation Date (specify mm/dd/yyyy)		Quotation validity (specify mm/dd/yyyy)	
Delivery time (days)		Warranty (months)	
Terms of payment		Condition of material (new, overhauled, surplus, etc)	
Approximate gross weight		Approximate volume measurements	
Seller's remarks			

Issue Date: Mar 17, 2023

Response date:

I hereby confirm that I have read, understood and agree with all terms and conditions written in this RFI.



Murilo Albiero, LTC
 Chief, Procurement Division/BAC

Name
 Title
 Company



**MINISTRY OF DEFENSE
BRAZILIAN ARMY
BRAZILIAN ARMY COMMISSION**
4632 Wisconsin Ave, NW, Washington DC

RFI-0009/2023 – ANNEX B

TECHNICAL SPECIFICATIONS

CAMOUFLAGE BODY ARMOR LEVEL III	SPECIFICATION: Nr 148/2022 – D Abst ISSUED: August, 15, 2017. REVISED: October <u>07</u> , 2022
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1. TECHNICAL FEATURES

1.1 Description

- a. The body armor shall be in accordance with NIJ STD 0101.06 requirements.
- b. The body armor must have ballistic protection level III (NIJ STD 0101.06), when used in conjunction with ballistic plates, and ballistic protection level IIIA (NIJ STD 0101.06) when used stand-alone (flexible armor only).
- c. Size: S, M, L, XL e XXL.
- d. The maximum total weight of complete body armor (one carrier, panels and plates) must follow Table 1.

Table 1 - Maximum weight of the body armor in kilograms

SIZE				
S	M	L	XL	XXL
6,5	7,0	7,5	8,0	8,5

- e. The carriers shall be in accordance to figures 1 and 2 and item 1.3. Its shape and dimensions must allow adequate fitting of the ballistic panels and the ballistic plates.
- f. The dimensions of the ballistic panels shall be in accordance with Figures 3 to 5 and Tables 9 to 11.
- g. The ballistic plates must have 254±10 mm wide and 305±10 mm high. **Only full cut or shooter's cut plates is accepted.**
- h. The body armor must have a warranty of at least 7 (seven) years.

i. AT ANY TIME DURING ITS USEFUL LIFETIME, THE MATERIAL MAY HAVE ITS BALLISTIC PERFORMANCE TESTED. IN CASE OF UNSATISFACTORY PERFORMANCE THE WARRANTY CAN BE ACTIVATED.

1.2 Components

a. **02 (two) camouflage carriers**, water repellent, 100% Polyamide, 500 denier, like CORDURA® (or similar), according items 1.3 and 1.4, with MOLLE attachment system that allows the user adjust the settings of their individual equipment, and with a carrying handle located in the back part. The interior side of the carrier shall be made of 3D mesh to improve thermal comfort of the user.

b. 03 (three) ballistic panels with III-A ballistic protection level (NIJ STD 0101.06), two front panels and one rear panel. All ballistic panels must have identical and uniform (continuous) ballistic solution, i.e. same ballistic configuration with same ballistic material and number of layers across all panels.

c. 02 (two) ballistic plates, one front and one back plate, ensuring level III (NIJ 0101.06 STD) for ballistic threat level to the body armor in conjunction with the flexible ballistic panels.

NOTE: All components shall be delivered together, as a kit. BALLISTIC PLATES AND PANELS SHALL BE DELIVERED FITTED IN ONE OF THE CAMOUFLAGE CARRIERS (i.e. delivery of isolated plates and panels will not be accepted), and the other camouflage carrier will serve as a spare part.

1.3 Camouflage Carrier Colorimetry (AATCC EP 6 - “Evaluation Procedure 6- Instrumental Color Measurement” and AATCC TM173 - “Calculation of Small Color Differences for Acceptability”).

Table 2 – Light green color pattern

COLOR	D65/10°			A/10°			TL84/10°			ΔE _{CMC21} maximum		
	L*	a*	b*	L*	a*	b*	L*	a*	b*	D65/10°	A/10°	TL84/10°
Light green	50,97	-6,91	14,88	51,21	-1,61	13,16	51,21	-6,06	16,93	5,0	5,0	5,0

Table 3 – Light green color pattern – Reflectance values

Wavelength (nm)	Reflectance R (%) SCI
	Light green color pattern
360	8,17
370	7,63
380	7,07
390	6,72
400	6,72
410	7,03
420	7,69
430	8,85
440	10,46
450	12,35
460	14,25
470	15,87
480	17,18
490	18,42
500	19,50
510	20,01
520	20,26
530	20,65



540	20,79
550	20,28
560	19,53
570	19,14
580	18,78
590	18,45
600	18,58
610	18,85
620	18,19
630	17,11
640	16,88
650	18,84
660	24,90
670	35,74
680	48,63
690	60,03
700	68,10
710	72,33
720	74,49
730	75,60
740	75,97

Table 4 – Brown color pattern

COLOR	D65/10°			A/10°			TL84/10°			ΔE _{CMC21} maximum		
	L*	a*	b*	L*	a*	b*	L*	a*	b*	D65/10°	A/10°	TL84/10°
Brown	24,95	6,07	2,10	25,93	7,87	3,87	24,96	4,77	2,07	5,0	5,0	5,0

Table 5 – Brown color pattern – Reflectance values

Wavelength (nm)	Reflectance R (%) SCI
	Brown color pattern
360	5,27
370	5,03
380	4,68
390	4,37
400	4,24
410	4,17
420	4,10
430	4,07
440	4,06
450	4,02
460	3,98
470	3,96
480	3,95
490	3,93
500	3,92
510	3,90
520	3,89
530	3,90
540	3,93
550	3,99

A

560	4,11
570	4,33
580	4,60
590	4,89
600	5,10
610	5,22
620	5,26
630	5,36
640	5,67
650	6,51
660	8,79
670	13,49
680	20,79
690	30,21
700	41,04
710	51,53
720	60,29
730	66,67
740	70,60

Table 6 – Dark green color pattern

COLOR	D65/10°			A/10°			TL84/10°			$\Delta E_{CMC 2:1}$ máximo		
	L*	a*	b*	L*	a*	b*	L*	a*	b*	D65/10°	A/10°	TL84/10°
Dark green	29,22	-2,16	3,42	29,38	0,88	3,29	28,97	-4,22	3,24	5,0	5,0	5,0

Table 7 – Dark green color pattern – Reflectance values

Wavelength (nm)	Reflectance R (%) SCI
	Dark green color pattern
360	6,38
370	5,99
380	5,49
390	5,06
400	4,87
410	4,80
420	4,77
430	4,85
440	4,97
450	5,10
460	5,24
470	5,40
480	5,58
490	5,81
500	6,03
510	6,21
520	6,35
530	6,42
540	6,39
550	6,24
560	5,98

570	5,66
580	5,36
590	5,21
600	5,16
610	5,10
620	4,98
630	4,98
640	5,35
650	6,64
660	10,40
670	18,19
680	29,47
690	42,00
700	53,62
710	62,19
720	67,68
730	71,03
740	72,90

1.4 Camouflage Carrier Requirements

Table 8 – Camouflage Carrier Requirements

Test	Standard	Requirement	Tolerance
Composition	AATCC 20 e AATCC 20A	100% Polyamide	± 3%
Structure	NBR 12996 ISO 7211-1	Plain Weave	-----
Mass	NBR 10591 ISO 3801	218 g/m ²	minimum
Density	ASTM D1059	500 Denier	± 10%
Breaking strength	ASTM 5035	Warp – 30 Kgf/cm Weft – 22 Kgf/cm	minimum
Abrasion resistance	ASTM 4966	1.600 cycles (Martindale - Sandpaper 400)	minimum
Water repellency	AATCC 22	100	-----
Color fastness	ISO 105-B02 (40h)	Rate: 4	minimum



2. PICTURES



Figure 1 – Front view



Figure 2 – Back view

A handwritten mark or signature in the bottom right corner of the page.

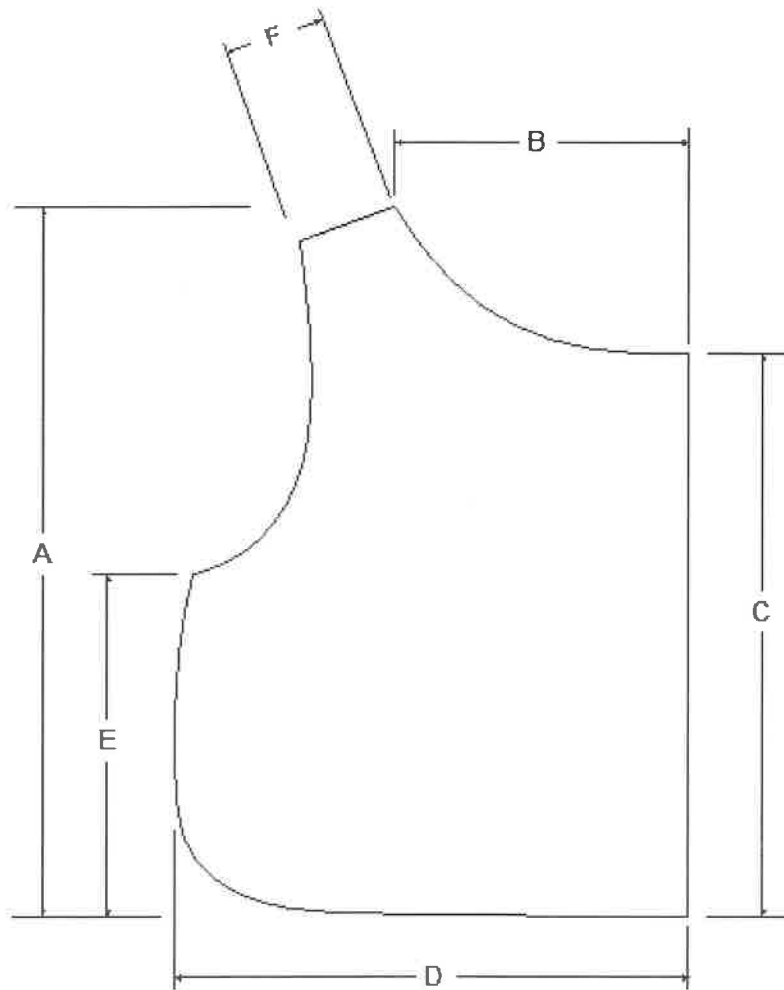


Figure 3 – Right front ballistic panel measure

Table 9 – Right front ballistic panel measure date (millimeters)

MEASUREMENTS	SIZES					Tolerance
	S	M	L	XL	XXL	
A	540	560	580	595	615	±10
B	220	230	240	250	260	±5
C	425	440	455	465	480	±10
D	380	400	420	440	460	±10
E	230	240	250	260	270	±5
F	75	80	85	90	95	±4

Note: Panel coverage shall not be considered for checking the measurement of ballistic panels.

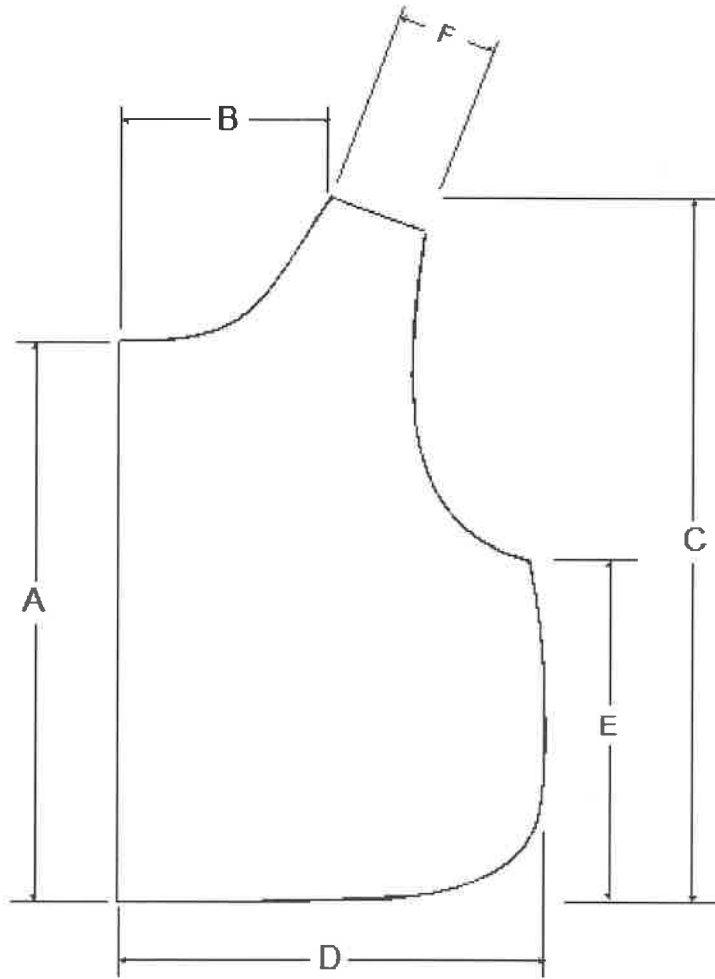


Figure 4 – Left front ballistic panel measure

Table 10 – Left front ballistic panel measure date (millimeters)

MEASUREMENTS	SIZES					Tolerance
	S	M	L	XL	XXL	
A	425	440	455	465	480	±10
B	160	170	180	190	200	±5
C	540	560	580	595	615	±10
D	310	330	350	370	390	±10
E	230	240	250	260	270	±5
F	75	80	85	90	95	±4

Note: Panel coverage shall not be considered for checking the measurement of ballistic panels.

A

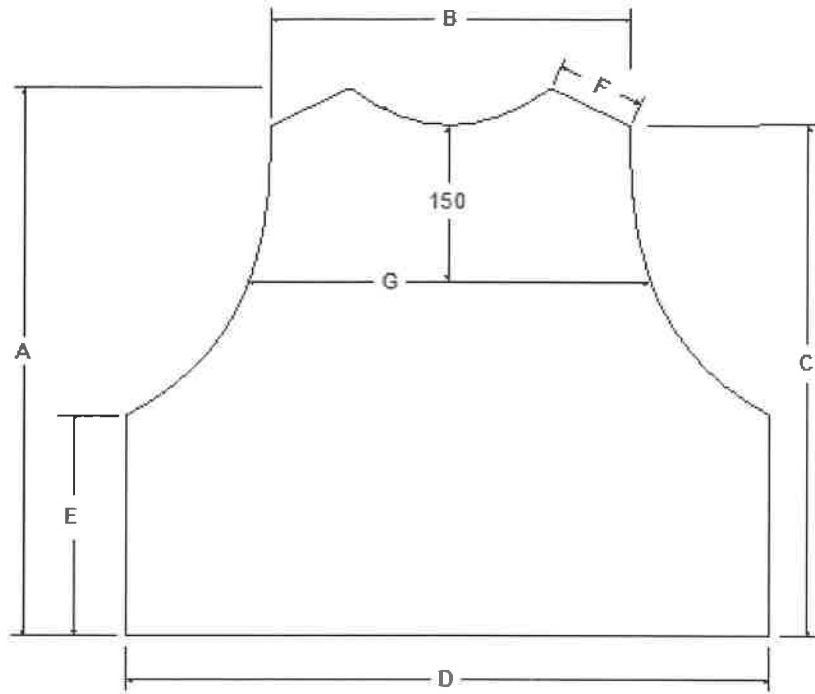


Figure 5 – Back ballistic panel measure

Table 11 – Back ballistic panel measure date (millimeters)

MEASUREMENTS	SIZES					Tolerance
	S	M	L	XL	XXL	
A	500	520	540	555	570	±10
B	325	335	345	355	365	±10
C	475	490	505	515	530	±10
D	565	585	605	625	645	±10
E	200	210	220	230	240	±5
F	75	80	85	90	95	±4
G	350	360	370	380	390	±10

Note: Panel coverage shall not be considered for checking the measurement of ballistic panels.

3. IDENTIFICATION

3.1 Every component (camouflage carriers, ballistic panels and ballistic plates) of body armor shall be durably and permanently marked with labels and be fully legible for the life of the armor in a readable type and font size, in accordance with 4.1.5.3 for NIJ STD 0101.06.

3.2 The Serial number shall be the same in all components (both camouflage carriers, ballistic panels and ballistic plates) of the same body armor.

A

3.3 The Lot number shall be the same in all components (both camouflage carriers, ballistic panels and ballistic plates) of the same body armor.

3.4 The label shall contain the following information, written in the **Portuguese language**:

a. Camouflage carrier

1) Name, logo or other identification of the manufacturer and name, logo or other identification of the supplier, just in case of manufacturer and supplier are not the same;

2) Fabric composition of the carrier (e.g. polyamide);

3) warning stating that the user must check the presence of ballistic panels and ballistic plates to ensure the level of protection of the body armor and that the carrier does not offer ballistic protection without the ballistic panels and/or ballistic plates;

4) Statement that the model of ballistic armor has been tested and approved according NIJ STD 0101.06;

5) Contract reference (e.g. “CONTRATO Nr XX/20YY – COLOG / D Abst);

6) Size;

7) Date of manufacture;

8) Date of warranty;

9) Lot number;

10) Serial number;

11) A model designation that uniquely identifies the component for purchasing purposes;

12) **NATO Stock Number (NSN): S – 8470190060595, M – 8470190060596, L – 8470190060597, XL – 8470190060598, XXL – 8470190060599;**

13) Care instructions; and

14) Inscription “PRODUTO DE USO EXCLUSIVO DO EXÉRCITO BRASILEIRO – VENDA PROIBIDA”.

b. Ballistic panels

1) Name, logo or other identification of the manufacturer and name, logo or other identification of the supplier, just in case of manufacturer and supplier are not the same;

2) Fabric composition of the ballistic panels (e.g. Polyethylene, aramid, etc.);

3) The rated level of protection, according to NIJ STD 0101.06;

4) Statement that the model of ballistic panels has been tested and approved according NIJ STD 0101.06;

5) Size;



- 6) Date of manufacture;
- 7) Date of warranty;
- 8) Lot number;
- 9) Serial number;
- 10) A model designation that uniquely identifies the component for purchasing purposes;
- 11) Strike face or wear face;
- 12) Care instructions; and
- 13) Manufacturing site.

c. Ballistic plates

- 1) Name, logo or other identification of the manufacturer and name, logo or other identification of the supplier, just in case of manufacturer and supplier are not the same;
- 2) Fabric composition of the ballistic plates (e.g. Polyethylene or Aramid);
- 3) warning stating that the ballistic plate shall be used in conjunction with the ballistic panels;
- 4) Statement that the model of ballistic plates has been tested and approved according NIJ STD 0101.06;
- 5) Size;
- 6) Date of manufacture;
- 7) Date of warranty;
- 8) Lot number;
- 9) Serial number;
- 10) Strike face or wear face;
- 11) A model designation that uniquely identifies the component for purchasing purposes; and
- 12) Care instructions.



4. REQUIREMENTS FOR PROTOTYPE AND LOT ACCEPTANCE TEST

4.1 The body armors supplied shall be subjected to acceptance testing by one of the US laboratories authorized by NIJ (National Institute of Justice) to execute NIJ 0101.06 testing. The test sample shall consist of 27 body armor **per size and per production batch**.

a. Except in cases of force majeure, a technical delegation from Supply Directorate of Brazilian Army, shall accompany the acceptance test (P-BFS and BL Tests), as well as performing a visual inspection of the sample to check the visual compliance of the samples with the technical specification.

4.2 Body Armor shall be tested in accordance with the Section 7 of NIJ STD 0101.06 for protection level IIIA and III, and the acceptance testing shall contain the following tests:

- a. Label Permanency and Durability Tests, according to item 4.1.5.3 of NIJ STD 0101.06;
- b. Perforation and Backface Signature Test (P-BFS), according to item 7.8 of NIJ STD 0101.06; and
- c. Ballistic Limit (BL) Determination Test **with the results of V05** for each test threat, according to item 7.9 of NIJ STD 0101.06.

4.3 Test samples of acceptance testing will be selected according to **Table 12 and Table 13. See notes of Table 12 and Table 13 for conditioned samples.**

Table 12 – Number of Samples for level III-A Tests

LEVEL III-A (BASED ON FIGURE 3 OF NIJ STD 0101.06)						
TEST	THREAT	BODY ARMOR SAMPLES REQUIRED FOR TESTS				TOTAL
		NEW		CONDITIONED ⁽¹⁾		
		TEST SAMPLE	SPARE	TEST SAMPLE	SPARE	
P-BFS	.357 SIG FMJ FN	2	1	1	1	5
P-BFS	.44 Magnum SJHP	2	1	1	1	5
BL	.357 SIG FMJ FN	5	0	1	0	6
BL	.44 Magnum SJHP	5	0	1	0	6
TOTAL		14	2	4	2	22

Note (1): For conditioned samples: the panels (flexible armor) shall be subjected to the armor conditioning protocol described in section 5 of NIJ 0101.06 prior to ballistic testing.

Table 13 – Number of Samples for level III Tests

LEVEL III (BASED ON FIGURE 5 OF NIJ STD 0101.06)					
TEST	THREAT	BODY ARMOR SAMPLES REQUIRED FOR TESTS			TOTAL
		CONDITIONED ⁽²⁾			
		TEST SAMPLE	SPARE		
P-BFS	7.62 mm NATO FMJ	2	1	3	
BL	7.62 mm NATO FMJ	2	0	2	
TOTAL		4	1	5	

Note (2): For conditioned samples: for an in conjunction armors, only the plates (rigid armor) shall be subjected to the armor conditioning protocol described in section 6 of NIJ 0101.06 prior to ballistic testing and the panels (flexible armor) shall be tested as new.

4.4 Test Report of acceptance testing shall contain:

- a. result of Label Permanency and Durability Tests, according to item 4.1.5.3 of NIJ STD 0101.06;
- b. result of Perforation and Backface Signature Test (P-BFS), according to item 7.8 of NIJ STD 0101.06; and
- c. result of Ballistic Limit (BL) Determination Test **with the results of V05** for each test threat, according to item 7.9 of NIJ STD 0101.06.

5. APPROVAL CRITERIA

5.1 **P-BFS Performance Requirements**, according 7.8.8 for NIJ STD 0101.06;

5.2 **Ballistic Limit Performance Requirements**, according 7.9.5 for NIJ STD 0101.06;

5.3 Compliance of Label Permanency and Durability Tests, according to item 4.1.5.3 of NIJ STD 0101.06; and

5.4 Compliance of visual inspection of the sample with the technical specification.

5.5 Only after receiving the Test Report of acceptance testing, Supply Directorate of Brazilian Army will issue a technical decision on the results of acceptance testing.

