

THIS AGREEMENT, made and entered into this 7th day of June, 2011, is by and between the City of Fort Lauderdale, a Florida municipality, ("City"), whose address is 100 North Andrews Avenue, Fort Lauderdale, FL 33301-1016, and Protective Products Enterprises, Inc., a Delaware corporation authorized to transact business in the State of Florida, ("Contractor" or "Company"), whose address and phone are 1655 NW 136 Avenue, Sunrise, FL 33323, Phone: 954-846-8222, Fax: 954-846-0555.

WHEREAS, the City issued Request for Proposal Number 114-10626 ("RFP"), and the Contractor submitted a proposal in response to the RFP; and

WHEREAS, on April 20, 2011, the City Commission of the City of Fort Lauderdale approved an agreement with Contractor for the goods or services described in the RFP (Pur-03, CAR No. 11-0544),

NOW, THEREFORE, for and in consideration of the mutual promises and covenants set forth herein and other good and valuable consideration, the City and the Contractor covenant and agree as follows:

1. The Contractor agrees to provide to the City police ballistic resistant vest packages in accordance with and in strict compliance with the specifications, terms, conditions, and requirements set forth in the RFP and any and all addenda thereto beginning April 20, 2011, and ending April 19, 2013.

2. This contract form G-110 Rev. 01/10, the RFP, any and all addenda to the RFP and the Contractor's response thereto, and the Contractor's proposal in response to the RFP are integral parts of this Contract, and are incorporated herein.

3. In the event of conflict between or among the contract documents, the order of priority shall be as follows:

- First, this contract form, G-110 Rev. 01/10;
- Second, any and all addenda to the RFP in reverse chronological order;
- Third, the RFP;
- Fourth, the Contractor's response to any addendum requiring a response;
- Fifth, the Contractor's response to the RFP.

4. The Company warrants that the goods and services supplied to the City pursuant to this Contract shall at all times fully conform to the specifications set forth in the RFP and be of the highest quality. In the event the City, in the City's sole discretion, determines that any product or service supplied pursuant to this Contract is defective or does not conform to the specifications set forth in the RFP the City reserves the right unilaterally to cancel an order or cancel this Contract upon written notice to the Contractor, and reduce commensurately any amount of money due the Contractor.

5. The Contractor shall not present any invoice to the City that includes sales tax (85-8012514506C-7) or federal excise tax (59-6000319).

6. Contractor shall direct all invoices in duplicate for payment to Finance Department, City of Fort Lauderdale, 100 N. Andrews Avenue, 6th Floor, Fort Lauderdale, FL 33301. Any applicable discount MUST appear on the invoice.

7. This Contract excludes optional items described in the Contractor's response to the RFP, except that the City's employees who are issued police ballistic resistant vest packages purchased pursuant to this Contract may purchase such optional items at the prices set forth in the Contractor's response to the RFP.

IN WITNESS WHEREOF, the City and the Contractor execute this Contract as follows:

CITY OF FORT LAUDERDALE

By: [Signature]
Director of Procurement Services

Approved as to form:

[Signature]
Senior Assistant City Attorney

ATTEST

Print Name:
Title:

CONTRACTOR

By: [Signature]
Mike Kilbane
Chief Executive Officer

(CORPORATE SEAL)

STATE OF FLORIDA :
COUNTY OF BROWARD :

The foregoing instrument was acknowledged before me this 31 day of May, 2011, by Mike Kilbane as chief executive officer for Protective Products Enterprises, Inc., a Delaware corporation authorized to transact business in the State of Florida

(SEAL)

[Signature]
Notary Public, State of Florida
(Signature of Notary)



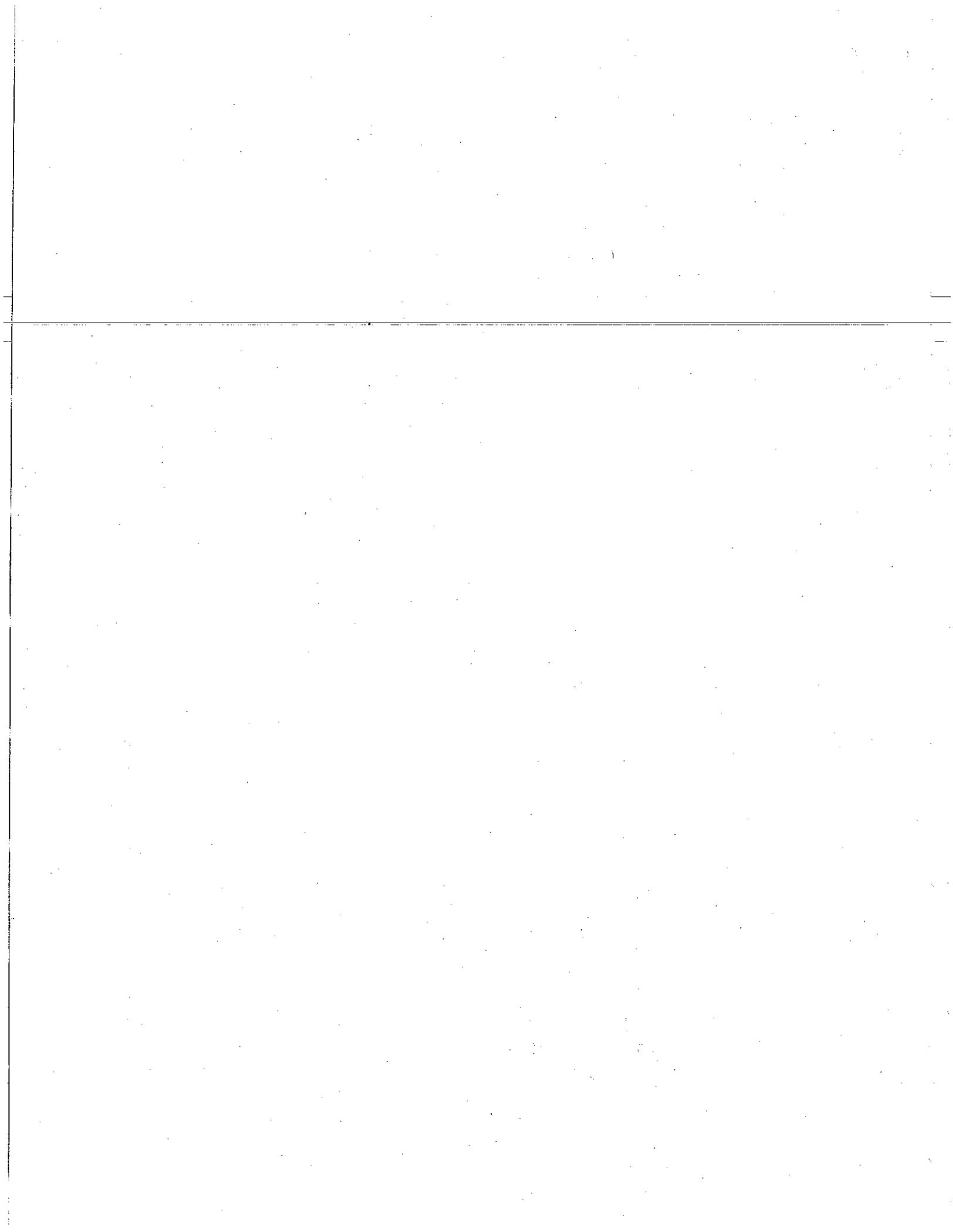
MARK ALAN JACKSON
MY COMMISSION # DD 939597
EXPIRES: December 19, 2013
Bonded Thru Budget Notary Services

Mark A Jackson
(Print, Type, or Stamp Commissioned Name of Notary Public)

Personally Known X OR Produced ID _____
Type of ID Produced _____

CONTRACT
COPY

1	Letter of Introduction Signature Page Non-Collusion Statement
2	Professional License
3	Company Profile
4	Quality and Features Measurement Plan Technical Specifications Care Instructions
5	References
6	NIJ Letters of Compliance Warranty
7	Delivery Schedule
8	Qualifications and Experience
9	Cost / Proposal Pages
10	Insurance ISO Certification Quality Manual



ADDENDUM # 1

State of Florida
Department of Management Services
INVITATION TO BID
Body Armor
ITB # 14-680-050-O
December 27, 2010

The Department hereby answers the one question posed by an interested vendor. Unless expressly indicated, the answer included herein does not amend the terms of the solicitation documents. This addendum need not be returned with the Response. The answer to the vendor's question is listed below.

Also, the Timeline has been revised. ITB responses are now due by 2:00 PM EST on Wednesday, January 12, 2011. There are no other changes to any of the terms, conditions or other requirements of this ITB based on this Addendum.

- **(Question)** Buffers USA, in Jacksonville, FL, supplies a Ballistic Floation Vest for use around water. Would this be a type of vest you are looking for?
- **(Answer)** There are two categories of Body Armor identified in the solicitation, and they are listed in Section 1.1, Purpose and Scope. Both Ballistic and Stab-Resistant vests must be certified by the National Institute of Justice (NIJ), and Ballistic vests must be compliant with NIJ Standard 1010.06 (NIJ .06 compliant). If your product has been approved by the NIJ, and is on the following URL: (<http://www.justnet.org/Pages/Topic.aspx?opentopic=10&topic=11>, Body Armor CPL), it can be submitted for review.

REVISED TIMELINE:

Issue ITB in the MyFloridaMarketPlace Sourcing Tool	12/13/2010
Questions from Respondents Due via the MyFloridaMarketPlace Sourcing Tool Q & A Board (see Section 2.5) no later than 5:00 pm EST.	12/20/2010
Post Responses to Respondents' Questions in the MyFloridaMarketPlace Sourcing Tool and the Vendor Bid	12/27/2010

System.	
ITB Responses Due within the MyFloridaMarketPlace Sourcing Tool and any hard copy documents and CD due no later than 2:00 pm EST	1/12/2011
Post Notice of Intent to Award on the Vendor Bid System	1/18/2011
Contract Award	Per Section 2.17

The Department reserves the right to issue Amendments or Addendums to the solicitation. Notice of any Amendment or Addendum will be posted within MyFloridaMarketPlace and/or the Vendor Bid System. Information posted to the Vendor Bid System may be accessed at www.myflorida.com, under the solicitation number 1-680-050-O (click on Business, Doing Business with the State, Vendor Bid System, Search Advertisements, and then search Department advertisements using the bid number). Each Vendor is responsible for monitoring the MyFloridaMarketPlace Sourcing Tool and the Vendor Bid System sites for new or changing information concerning the solicitation.

FAILURE TO FILE A PROTEST WITHIN THE TIME PRESCRIBED IN §120.57(3) FLORIDA STATUTES, OR FAILURE TO FILE A BOND OR OTHER SECURITY WITHIN THE TIME ALLOWED FOR FILING A BOND SHALL CONSTITUTE A WAIVER OF PROCEEDINGS UNDER CHAPTER 120, FLORIDA STATUTES.



City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 2

RFP 114-10626
POLICE TACTICAL PACKAGES

ISSUED: November 22, 2010

Below are specific questions/clarifications asked in BidSync, along with the City's response to those questions/clarifications.

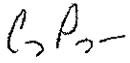
Under Part II – RFP Schedule states the First Pre-Proposal Conference / On Site Testing date as 11/29/10 at 9:00AM EDT. This is incorrect and should state 11/30/10 at 9:00AM EDT. On Page 2 of the Bid under Pre Bid Conference it is stated correctly as 11/30/10 at 9:00AM EDT.

All other terms, conditions, and specifications remain unchanged.

This Addendum No. 2 should be submitted with your RFP Response.

Michael Walker, CPPB
Procurement and Contracts Manager

Company
Name: Protective Products Enterprises, Inc.
(Please print)

Proposer's
Signature: 

Date: 01/17/11





City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
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ADDENDUM NO. 3

RFP 114-10626
POLICE TACTICAL PACKAGES

ISSUED: November 23, 2010

Below are specification changes made to the Level II packages and Level IIIA upgrade packages.

Currently stated in this Request for Proposal under PART I – INTRODUCTION/INFORMATION, Item 05. A) 4. (PAGE 6), and also under PART VII – PROPOSAL PAGES – COST PROPOSAL, Item 1, Letter O (Page 21), it states: "Areal density weight of the ballistic panels shall be no greater than 0.90, for the Level II vests".

This has been changed to now read: "Areal density weight of the ballistic panels shall be no greater than 0.99, for the Level II vests".

Currently stated in this Request for Proposal under PART VII – PROPOSAL PAGES – COST PROPOSAL, Item 2 (PAGE 22) for the NIJ06 Standard Level IIIA Ballistic Vest package upgrade (from Level II), it states: "Areal density weight of these ballistic panels shall be no greater than 1.15".

This has been changed to now read: "Areal density weight of these ballistic panels shall be no greater than 1.30" for the Level IIIA vests".

All other terms, conditions, and specifications remain unchanged.

This Addendum No. 3 should be submitted with your RFP Response.

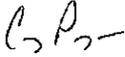
Michael Walker, CPPB
Procurement and Contracts Manager

Company

Name: Protective Products Enterprises, Inc.

(Please print)

Proposer's

Signature: 

Date: January 17, 2010



City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 4

RFP 114-10626
POLICE TACTICAL PACKAGES

~~ISSUED: December 28, 2010~~

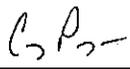
The Proposal Due Date in RFP 114-10626 under PART II – RFP Schedule, states that the Request For Proposal shall open (due date), on January 17, 2011, prior to 2:00pm EST. This has been changed to read that the Request For Proposal (due date) shall open on Tuesday, January 18, 2011, prior to 2:00pm EST. This change is being made as the City is closed on Monday, January 17, 2011 for Martin Luther King's birthday.

All other terms, conditions, and specifications remain unchanged.

This Addendum No. 4 should be submitted with your RFP Response.

Michael Walker, CPPB
Procurement and Contracts Manager

Company
Name: Protective Products Enterprises, Inc.
(Please print)

Proposer's
Signature: 

Date: January 17, 2010



PROTECTIVE PRODUCTS

January 17, 2011

Michael Walker
City of Fort Lauderdale
100 North Andrews Avenue
Suite 619
Fort Lauderdale, FL 33301

Dear Mr. Walker:

Protective Products Enterprises, Inc. is a leading manufacturer of high performance bullet resistant products servicing the needs of Law Enforcement, Government, Military, and Security Professional worldwide. The Protective Products brand has been in this business of saving lives since 1993 and has celebrated its' seventeenth year in this ever changing global economy.

Our ballistic product offering is certified to the latest NIJ 0101.06 standard and we have taken additional steps to ensure the safety of law enforcement officers by conducting special threat testing at NIJ Standard 0101.06 approved laboratories. Our ballistic products are special threat tested using the same NIJ 0101.06 testing protocol for ammunition such as Winchester and Speer and we also submit our ballistic products to be tested to the US Fragmentation Testing Protocol.

Protective Products Enterprises, Inc. located in Sunrise, FL proudly manufactures and assembles its products in our 128,000 square foot facility that is climate controlled to reduce any possibility of degradation of materials. We are using the latest in cutting and sewing technology to ensure that we produce and deliver the best quality life saving products today. PPE invests significantly in our Research and Development Department that consists of a ballistics engineer, a ceramics engineer, and a designer that reviews and tests the latest materials in the market place.

Protective Products Enterprises, Inc. firmly believes in exceeding customer expectations through performance, quality, and service. Listed below will be the personnel directly responsible for fittings and alterations, order entry and status of production, and any questions pertaining to our product line.

Andrew McCleister Territory Manager 1655 Northwest 136 Ave Sunrise, FL 33323 (954) 846-8222 amccleister@body-armor.com	Beverly Slavick Customer Relations Manager 1655 Northwest 136 Ave Sunrise, FL 33323 (954) 846-8222 bslavick@body-armor.com	Cory Provenzano Business Development Director 1655 Northwest 136 Avenue Sunrise, FL 33323 (954) 846-8222 cprovenzano@body-armor.com
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Some of our clientele include the United States Marine Corps., Department of Homeland Security, New York City Police Department, Chicago Police Department, and hopefully we can provide your agency the same high performance products at a quality price.

If you have any questions regarding our proposal for your agency, please feel free to contact me anytime at 954-846-8222.

Sincerely,

Cory Provenzano, Director of Business Development

1655 NW 136 Avenue * Sunrise, FL 33323
Phone: (954) 846-8222 * (800) 509-9111 * Fax: (954) 846-0555
Website: www.body-armor.com

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BID/PROPOSAL SIGNATURE PAGE

How to submit bids/proposals: It is preferred that bids/proposals be submitted electronically at www.bidsync.com, unless otherwise stated in the bid packet. If mailing a hard copy, it will be the sole responsibility of the Bidder to ensure that the bid reaches the City of Fort Lauderdale, City Hall, Procurement Department, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, prior to the bid opening date and time listed. Bids/proposals submitted by fax or email will NOT be accepted.

The below signed hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the CITY and such acceptance covers all terms, conditions, and specifications of this bid/proposal.

Please Note: If responding to this solicitation through BidSync, the electronic version of the bid response will prevail, unless a paper version is clearly marked by the bidder in some manner to indicate that it will supplant the electronic version. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

Submitted by: C. P. [Signature] 01/17/11
(signature) (date)

Name (printed) Cory Provenzano Title: Director, Business Development
Company: (Legal Registration) Protective Products Enterprises, Inc.

CONTRACTOR, IF FOREIGN CORPORATION, MAY BE REQUIRED TO OBTAIN A CERTIFICATE OF AUTHORITY FROM THE DEPARTMENT OF STATE, IN ACCORDANCE WITH FLORIDA STATUTE §607.1501 (visit http://www.dos.state.fl.us/).

Address: 1655 NW 136 Avenue
City Sunrise State: FL Zip 33323
Telephone No. (954) 846-8222 FAX No. (954) 846-0555 Email: lsagal@body-armor.com

Delivery: Calendar days after receipt of Purchase Order (section 1.02 of General Conditions): 30 - 45

Payment Terms (section 1.03): Net 30 Total Bid Discount (section 1.04): 0%

Does your firm qualify for MBE or WBE status (section 1.08): MBE WBE

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:

<u>Addendum No.</u>	<u>Date Issued</u>
1 and 2	11/22/10

VARIANCES: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. **HAVE YOU STATED ANY VARIANCES OR EXCEPTIONS BELOW? BIDDER MUST CLICK THE EXCEPTION LINK IF ANY VARIATION OR EXCEPTION IS TAKEN TO THE SPECIFICATIONS, TERMS AND CONDITIONS.** If this section does not apply to your bid, simply mark N/A in the section below.

Variations:

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<u>NAME</u>		<u>RELATIONSHIPS</u>
_____	N/A	_____
_____		_____

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

LOCAL BUSINESS TAX RECEIPT

CITY OF SUNRISE

1607 NW 136th AVE., BLDG. B
SUNRISE, FL 33323
(954) 572-2352

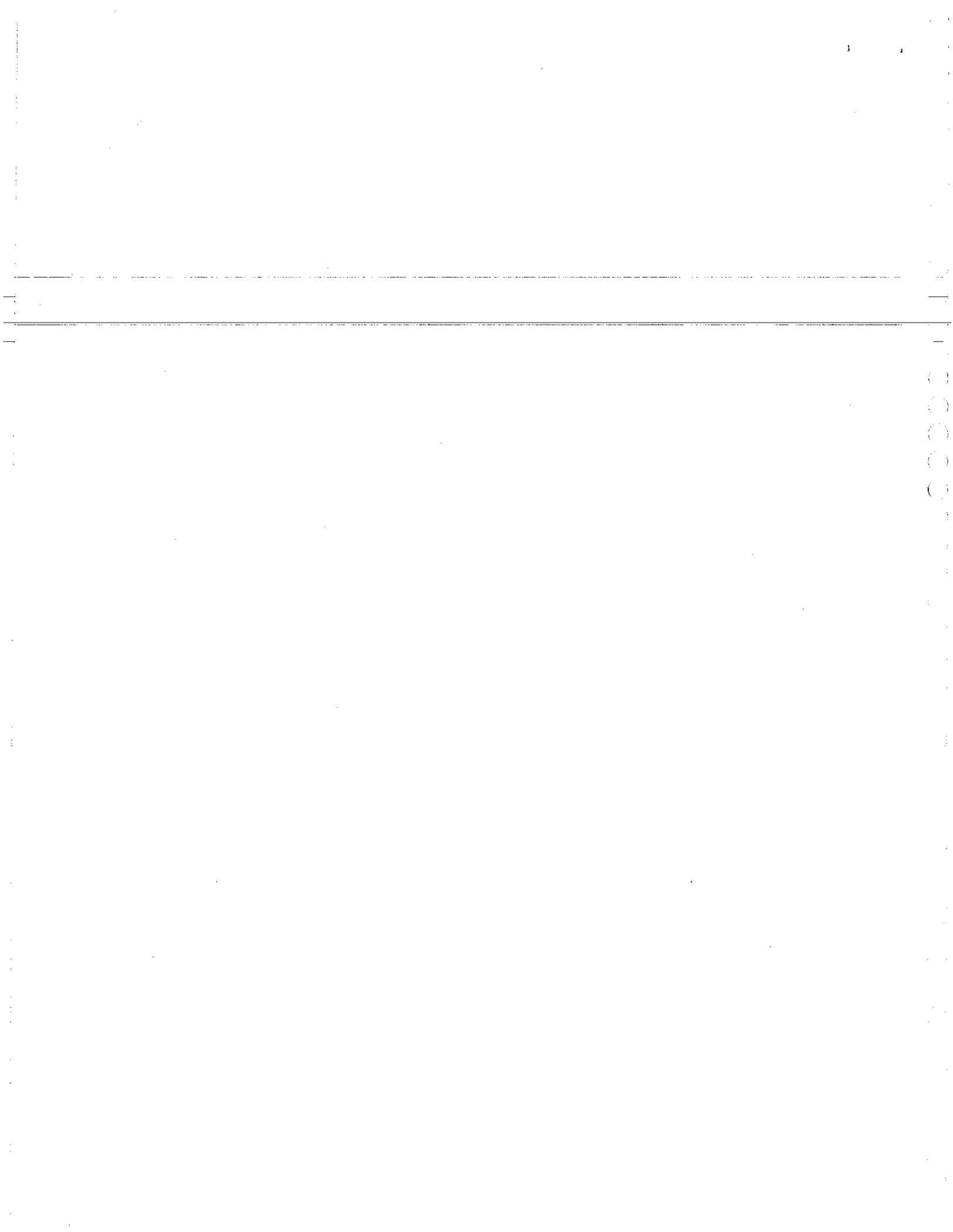
Business name	PROTECTIVE PRODUCTS INTL	Cti nbr	17334
Location addr	1655 NW 136 AVE M 100		SH
Lic Nbr/Class	10 00015495 MANUFACTURING		
Issue date	11/10/09	Expiration date	9/30/10
Lic Fee	365.54		
Del Rec	.00		
Adm Fee	50.00		
Fire Insp	1907.05		
Penalty	.00		
Total	2326.59		
Comments	BODY ARMOR		

RECEIPT EXPIRES SEPTEMBER 30, 2010

PROTECTIVE PRODUCTS INTL
1655 NW 136 AVE M 100
SUNRISE FL 33323

RECEIPT MUST BE CONSPICUOUSLY DISPLAYED
TO PUBLIC VIEW AT BUSINESS LOCATION.

NOTICE: THIS RECEIPT BECOMES NULL & VOID IF OWNERSHIP, BUSINESS NAME, OR ADDRESS IS CHANGED. TAXPAYER MUST APPLY TO BUSINESS TAX DIVISION FOR A NEW RECEIPT.





PROTECTIVE PRODUCTS

Company Profile

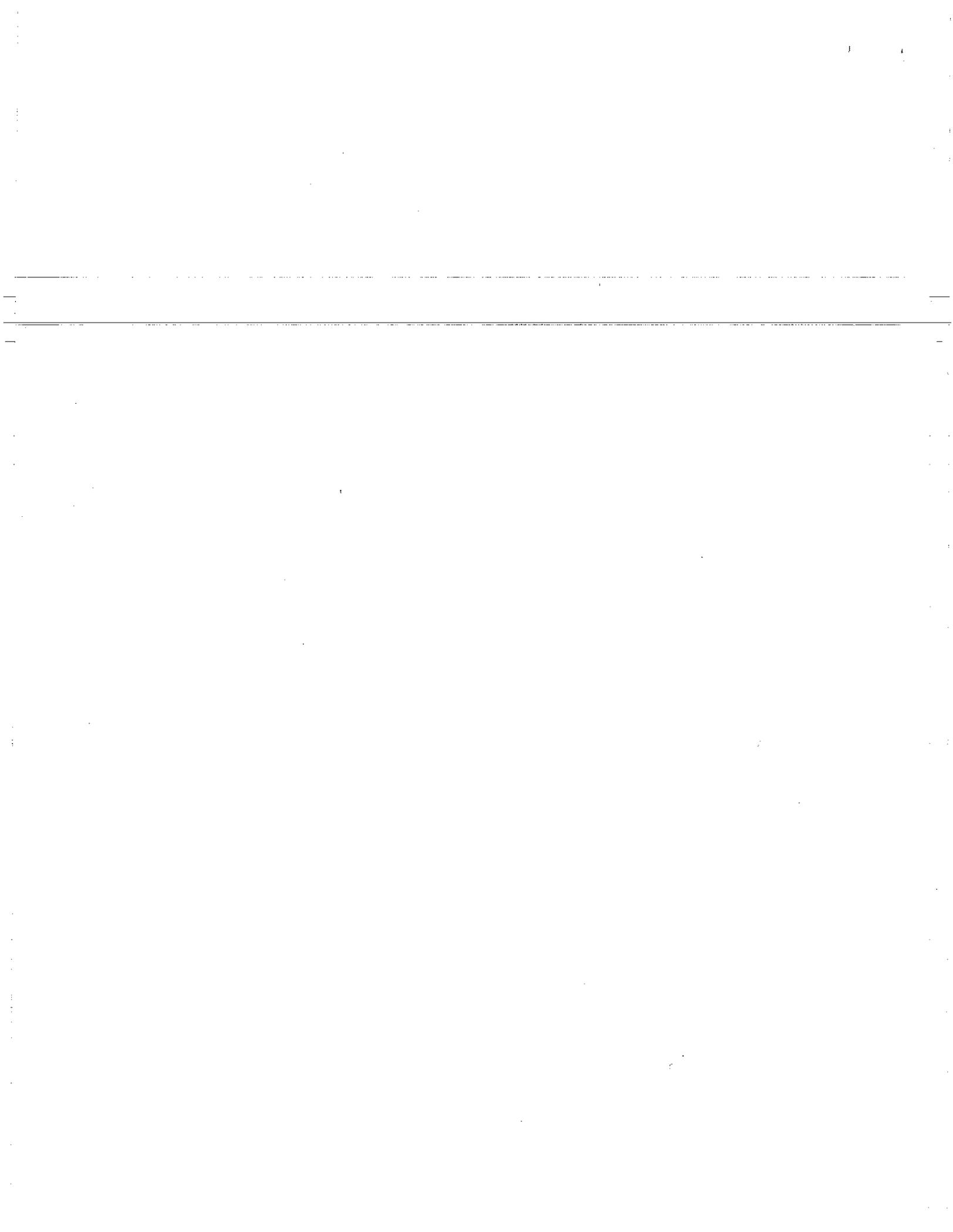
Per the requirements listed for this proposal, our Company Profile is as follows:

Legal Name:	Protective Products Enterprises, Inc.
Address:	1655 NW 136 Avenue Sunrise, FL 33323
Phone:	(954) 846-8222
Fax:	(954) 846-0555
E-mail:	LSagal@body-armor.com
Web:	www.body-armor.com
Legal Entity:	Corporation
Years in Business:	17

Company is National.

Executive Management Team

CEO	Michael Kilbane
CFO	Thomas Steffen
VP	Andrew McCleister





Quality and Features

Protective Products Enterprises, Inc. is proposing the Python DX II (neutral), DXF II (female), DX IIIA (neutral), and DXF IIIA (female) series. The level II and IIIA DX series meets the technical specifications on weight for this RFP and exceeds the NIJ 0101.06 standard by including special threat testing. The Python DX II is special threat tested using the NIJ 0101.06 testing protocol for the Winchester 9mm 127 grain +P+ SXT and the Speer Gold Dot .357 Sig 125 grain GDHP. The Python DX IIIA is special threat tested using the NIJ 0101.06 testing protocol for the Winchester 9mm 127 grain +P+ SXT and the FN 5.7 x 28 SS 195. The Python DX II and IIIA is also testing to the United States Military Fragmentation Testing Protocol using the 2 grain, 4 grain, 16 grain, and 64 grain projectiles. The carrier system of the Python is manufactured using a light weight highly durable Supplex on the exterior and the interior fabric is antimicrobial and moisture wicking for the warranty period of the carrier which is 2 years. The shoulder and waist straps are completely adjustable and removable for a precise fit and a larger trauma plate pocket on the exterior of the carrier to accommodate up to a 7" x 9" trauma plate.



PROTECTIVE PRODUCTS

Measurements and Training Plan

Under the guidance of Cory Provenzano, our Director of Business Development, Protective Products offers individual support to the City of Fort Lauderdale. This will be done through mutually agreed appointment times by utilizing a network of highly trained Corporate Management and Sales Staff to ensure that a flexible and workable schedule will be available for measurements. In particular, Andrew McCleister, our specified Territory Manager for the State of Florida, will assist Mr. Provenzano in the measurement process. Mr. Provenzano, who has been in the industry since 1994, has a thorough knowledge of the entire PPE product line, as well as exemplary measuring skills. He currently travels on a weekly basis training our domestic network of Manufacturers Representatives, Territory Managers, and Dealers on new products, specific aspects of body armor sizing and fitting, product training, care, cleaning, and maintenance coverage as well as discussion and demonstration of the capabilities and limitations of body armor protection.

Protective Products further offers a fully trained, in-house customer service representative available to take your calls from 8:30 am through 5:30 pm, EST. All service representatives go through rigorous training and are knowledgeable, prompt, professional and courteous to make sure the City of Fort Lauderdale is properly serviced. PPE can be reached toll-free at (800) 509-9111, or through our general email address, sales@body-armor.com, whereby concerns will be forwarded to the proper party.

Beverly Slavick, will be the dedicated Customer Relations Manager throughout the City of Fort Lauderdale contract. Ms. Slavick has been with Protective Products since March 2008. Her responsibilities include order acknowledgement, order confirmation, order entry, and status on shipment of product. Ms. Slavick may be reached directly at (954) 703-7626 or via e-mail at bslavick@body-armor.com.



DX-II
DX SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0038
REV: 031210



1. **SCOPE:**

1.1. This specification fully describes the minimum requirements for furnishing concealable, bullet resistant, soft body armor. The intent is to purchase state of the art concealable body armor with optimum protection and wearability. The soft body armor alone shall provide a minimum of threat level II ballistic protection as described by the National Institute of Justice's (NIJ) Standard-0101.06 dated July 2008 and be available in sizes C1 – C5. All armor provided must be in complete compliance with this specification, as well as provide compliance to the NIJ Standard for both labeling and ballistic performance. Only vests manufactured entirely in the United States will be accepted. Those vests that have any portion of the manufacturing process done outside the United States will be rejected.

2. **BALLISTIC PANEL CONSTRUCTION**

2.1. The ballistic panels shall be constructed of Woven Twaron (Para-Aramid Fiber – manufactured by Teijin Aramid High Performance Fabrics) and Dyneema (Ultra High Molecular Weight Polyethylene – manufactured by DSM). The department has selected these materials; any bids, which represent products manufactured from other materials, shall be rejected.

2.1.1. It is the intent of the agency to procure the lightest weight Level II armor available in relation to areal density; therefore, the vest must not exceed 13.28oz. (.83lb.) per square foot.

3. **BALLISTIC PANEL COVER MATERIAL**

3.1. Each ballistic panel shall be covered in 100% weldable urethane laminated 200 denier nylon.

4. **BALLISTIC PANEL PERFORMANCE**

4.1. Each bidder must submit the summary of results for both P-BFS and BL testing reports for the vest being offered. The v50's must be performed in accordance with NIJ Standard-0101.06. All tests must be performed on clay backings by independent testing facilities approved by the NIJ. The purpose of the test is to establish a "benchmark" v50 and assure the quality of the combined ballistic materials lot by lot. Subsequent test results must remain within +/- 6%, the normal statistical variation for v50 testing and remain within these limits for the five year service life of the vest.



PROTECTIVE PRODUCTS

DX-II

DX SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0038

REV: 031210



5. **OTHER MATERIALS:**

5.1. All materials shall be new, unused, and without flaws which adversely affect appearance, durability and function.

5.1.1. **Thread** - The thread for all stitching shall be Kevlar, TEX 105, with a minimum of 5 stitches per inch.

5.1.2. **Loop Fasteners** – 1.5" Heat loop activated woven hook pieces must be utilized to suspend the armor panels inside the carrier system to prevent sagging.

6. **VEST IDENTIFICATION LABELS:**

6.1. Vests shall be labeled in accordance with NIJ Standard-0101.06. The label material shall be suitable to assure that the label itself shall withstand wear and/or laundering. The label shall remain readable during the guaranteed life of the outer shell and ballistic panels.

7. **LEVEL OF BALLISTIC PROTECTION:**

7.1. Each garment provided under this document shall provide **Type II** ballistic impact protection against both penetration and serious bodily injury as defined by NIJ Standard-0101.06. Each garment submitted shall be approved by the NIJ and Body Armor Compliance Testing Program.

8. **VENDOR QUALITY ASSURANCE PROGRAM:**

8.1. Successful manufacturer shall maintain a quality control system in accordance with ISO9001:2008 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

9. **PRODUCT LIABILITY INSURANCE:**

9.1. Upon award successful manufacturer shall provide proof of having product liability insurance in the amount of twenty-five million dollars prior to the date of bid opening and shall remain in effect for the duration of the contract.

10. **MINIMUM REQUIREMENTS:**

10.1. The specifications described herein shall be deemed the minimum standards acceptable by this agency. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to page and paragraph. This document will be submitted with the completed bid package.



PROTECTIVE PRODUCTS

DX-II

DX SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0038

REV: 031210



11. TECHNICAL SPECIFICATIONS:

MANUFACTURER	Protective Products
SERIES	DX
NIJ MODEL #	DX-II
NIJ THREAT LEVEL	II
NIJ CERTIFICATION SIZES	C1 – C5
BALLISTIC MATERIAL	Twaron / Dyneema
WEIGHT	.83 psf
THINNESS	.19 in (4.83mm)
DRY v50 – 9mm 124gr FMJ	1720 ft/s (524m/s)
DRY v05 – 9mm 124gr FMJ	1581 ft/s (482m/s)
COND. v50 – 9mm 124gr FMJ	1625 ft/s (495m/s)
DRY v50 – 357mag 158gr JSP	1653 ft/s (504m/s)
DRY v05 – 357mag 158gr JSP	1518 ft/s (463m/s)
COND. v50 – 357mag 158gr JSP	1536 ft/s (468m/s)
WET P-BFS Avg. – 9mm 124gr FMJ	31.6 mm
WET P-BFS Avg. – 357mag 158gr JSP	33.9 mm

Protective Products warrants that the above mentioned NIJ Model meets the designated threat level.



<p>DX-II</p> <p>DX SERIES</p> <p>In accordance with NIJ Standard-0101.06 Dated July 2008</p>
<p>SOFT BODY ARMOR SPECIFICATION</p> <p># EDN0038</p> <p>REV: 031210</p>
 

12. SPECIAL THREAT RESULTS:

DRY v50 – 9mm SXT 127gr +P+	1604 ft/s (489m/s)
WET P-BFS Avg. – 9mm SXT 127gr +P+	31.6 mm @ 1340 ft/s +/-30
DRY v50 – 357sig 125gr GDHP	1642 ft/s (500m/s)
WET P-BFS Avg.– 357sig 125gr GDHP	31 mm @ 1470 ft/s +/-30
*WET v50 - 2gr RCC	2710 ft/s (826m/s)
*WET v50 - 4gr RCC	2424 ft/s (739m/s)
*WET v50 - 16gr RCC	2047 ft/s (624m/s)
*DRY v50 - 17gr FSP	1912 ft/s (583m/s)
*WET v50 - 64gr RCC	1644 ft/s (501m/s)

*Tested in accordance with CO/PD 00-02H



DXF-II
DXF SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0039

REV: 031210



1. **SCOPE:**

1.1. This specification fully describes the minimum requirements for furnishing concealable, bullet resistant, soft body armor. The intent is to purchase state of the art concealable body armor with optimum protection and wearability. The soft body armor alone shall provide a minimum of threat level II ballistic protection as described by the National Institute of Justice's (NIJ) Standard-0101.06 dated July 2008 and be available in sizes C1 – C5. All armor provided must be in complete compliance with this specification, as well as provide compliance to the NIJ Standard for both labeling and ballistic performance. Only vests manufactured entirely in the United States will be accepted. Those vests that have any portion of the manufacturing process done outside the United States will be rejected.

2. **BALLISTIC PANEL CONSTRUCTION**

2.1. The ballistic panels shall be constructed of Woven Twaron (Para-Aramid Fiber – manufactured by Teijin Aramid High Performance Fabrics) and Dyneema (Ultra High Molecular Weight Polyethylene – manufactured by DSM). The ballistic panels for females shall be constructed in three sections, sized according to both bra and cup size and be available in cup sizes A through F. The department has selected these materials; any bids, which represent products manufactured from other materials, shall be rejected.

2.1.1. It is the intent of the agency to procure the lightest weight Level II armor available in relation to areal density; therefore, the vest must not exceed 13.28oz. (.83lb.) per square foot.

3. **BALLISTIC PANEL COVER MATERIAL**

3.1. Each ballistic panel shall be covered in 100% weldable urethane laminated 200 denier nylon.

4. **BALLISTIC PANEL PERFORMANCE**

4.1. Each bidder must submit the summary of results for both P-BFS and BL testing reports for the vest being offered. The v50's must be performed in accordance with NIJ Standard-0101.06. All tests must be performed on clay backings by independent testing facilities approved by the NIJ. The purpose of the test is to establish a "benchmark" v50 and assure the quality of the combined ballistic materials lot by lot. Subsequent test results must remain within +/- 6%, the normal statistical variation for v50 testing and remain within these limits for the five year service life of the vest.



PROTECTIVE PRODUCTS

DXF-II
DXF SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0039

REV: 031210



5. **OTHER MATERIALS:**

5.1. All materials shall be new, unused, and without flaws which adversely affect appearance, durability and function.

5.1.1. **Thread** - The thread for all stitching shall be Kevlar, TEX 105, with a minimum of 5 stitches per inch.

5.1.2. **Loop Fasteners** – 1.5" Heat loop activated woven hook pieces must be utilized to suspend the armor panels inside the carrier system to prevent sagging.

6. **VEST IDENTIFICATION LABELS:**

6.1. Vests shall be labeled in accordance with NIJ Standard-0101.06. The label material shall be suitable to assure that the label itself shall withstand wear and/or laundering. The label shall remain readable during the guaranteed life of the outer shell and ballistic panels.

7. **LEVEL OF BALLISTIC PROTECTION:**

7.1. Each garment provided under this document shall provide **Type II** ballistic impact protection against both penetration and serious bodily injury as defined by NIJ Standard-0101.06. Each garment submitted shall be approved by the NIJ and Body Armor Compliance Testing Program.

8. **VENDOR QUALITY ASSURANCE PROGRAM:**

8.1. Successful manufacturer shall maintain a quality control system in accordance with ISO9001:2008 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

9. **PRODUCT LIABILITY INSURANCE:**

9.1. Upon award successful manufacturer shall provide proof of having product liability insurance in the amount of twenty-five million dollars prior to the date of bid opening and shall remain in effect for the duration of the contract.

10. **MINIMUM REQUIREMENTS:**

10.1. The specifications described herein shall be deemed the minimum standards acceptable by this agency. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to page and paragraph. This document will be submitted with the completed bid package.



PROTECTIVE PRODUCTS

DXF-II

DXF SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0039

REV: 031210



11. TECHNICAL SPECIFICATIONS:

MANUFACTURER	Protective Products
SERIES	DXF
NIJ MODEL #	DXF-II
NIJ THREAT LEVEL	II
NIJ CERTIFICATION SIZES	C1 – C5
BALLISTIC MATERIAL	Twaron / Dyneema
WEIGHT	.83 psf
THINNESS	.19 in (4.83mm)
DRY v50 – 9mm 124gr FMJ	1664 ft/s (507m/s)
DRY v05 – 9mm 124gr FMJ	1565 ft/s (477m/s)
COND. v50 – 9mm 124gr FMJ	1625 ft/s (495m/s)
DRY v50 – 357mag 158gr JSP	1600 ft/s (488m/s)
DRY v05 – 357mag 158gr JSP	1467 ft/s (447m/s)
COND. v50 – 357mag 158gr JSP	1573 ft/s (480m/s)
WET P-BFS Avg. – 9mm 124gr FMJ	29.5 mm
WET P-BFS Avg. – 357mag 158gr JSP	33.5 mm

Protective Products warrants that the above mentioned NIJ Model meets the designated threat level.

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DX-III A
DX SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0042

REV: 031210



1. **SCOPE:**

1.1. This specification fully describes the minimum requirements for furnishing concealable, bullet resistant, soft body armor. The intent is to purchase state of the art concealable body armor with optimum protection and wearability. The soft body armor alone shall provide a minimum of threat level **III A** ballistic protection as described by the National Institute of Justice's (NIJ) Standard-0101.06 dated July 2008. All armor provided must be in complete compliance with this specification, as well as provide compliance to the NIJ Standard for both labeling and ballistic performance. Only vests manufactured entirely in the United States will be accepted. Those vests that have any portion of the manufacturing process done outside the United States will be rejected.

2. **BALLISTIC PANEL CONSTRUCTION**

2.1. The ballistic panels shall be constructed of Woven Twaron (Para-Aramid Fiber – manufactured by Teijin Aramid High Performance Fabrics) and Dyneema (Ultra High Molecular Weight Polyethylene – manufactured by DSM). The department has selected these materials; any bids, which represent products manufactured from other materials, shall be rejected.

2.1.1. It is the intent of the agency to procure the lightest weight Level **III A** armor available in relation to areal density; therefore, the vest must not exceed 18.88oz. (1.18lb.) per square foot.

3. **BALLISTIC PANEL COVER MATERIAL**

3.1. Each ballistic panel shall be covered in 100% weldable urethane laminated 200 denier nylon.

4. **BALLISTIC PANEL PERFORMANCE**

4.1. Each bidder must submit the summary of results for both P-BFS and BL testing reports for the vest being offered. The v50's must be performed in accordance with NIJ Standard-0101.06. All tests must be performed on clay backings by independent testing facilities approved by the NIJ. The purpose of the test is to establish a "benchmark" v50 and assure the quality of the combined ballistic materials lot by lot. Subsequent test results must remain within +/- 6%, the normal statistical variation for v50 testing and remain within these limits for the five year service life of the vest.



DX-III A
DX SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0042

REV: 031210



5. **OTHER MATERIALS:**

5.1. All materials shall be new, unused, and without flaws which adversely affect appearance, durability and function.

5.1.1. **Thread** - The thread for all stitching shall be Kevlar, TEX 105, with a minimum of 5 stitches per inch.

5.1.2. **Loop Fasteners** - 1.5" Heat loop activated woven hook pieces must be utilized to suspend the armor panels inside the carrier system to prevent sagging.

6. **VEST IDENTIFICATION LABELS:**

6.1. Vests shall be labeled in accordance with NIJ Standard-0101.06. The label material shall be suitable to assure that the label itself shall withstand wear and/or laundering. The label shall remain readable during the guaranteed life of the outer shell and ballistic panels.

7. **LEVEL OF BALLISTIC PROTECTION:**

7.1. Each garment provided under this document shall provide **Type IIIA** ballistic impact protection against both penetration and serious bodily injury as defined by NIJ Standard-0101.06. Each garment submitted shall be approved by the NIJ and Body Armor Compliance Testing Program.

8. **VENDOR QUALITY ASSURANCE PROGRAM:**

8.1. Successful manufacturer shall maintain a quality control system in accordance with ISO9001:2008 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

9. **PRODUCT LIABILITY INSURANCE:**

9.1. Upon award successful manufacturer shall provide proof of having product liability insurance in the amount of twenty-five million dollars prior to the date of bid opening and shall remain in effect for the duration of the contract.

10. **MINIMUM REQUIREMENTS:**

10.1. The specifications described herein shall be deemed the minimum standards acceptable by this agency. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to page and paragraph. This document will be submitted with the completed bid package.



DX-III A
DX SERIES
 In accordance with
 NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION
 # EDN0042
 REV: 031210




11. TECHNICAL SPECIFICATIONS:

MANUFACTURER	Protective Products
SERIES	DX
NIJ MODEL #	DX-III A
NIJ THREAT LEVEL	III A
NIJ CERTIFICATION SIZES	C1 – C5
BALLISTIC MATERIAL	Twaron / Dyneema
WEIGHT	1.18 psf
THINNESS	.27 in (6.86mm)
DRY v50 – 357sig 125gr TMJ	1913 ft/s (583m/s)
DRY v05 – 357sig 125gr TMJ	1789 ft/s (545m/s)
COND. v50 – 357sig 125gr TMJ	1839 ft/s (561m/s)
DRY v50 – 44mag 240gr JHP	1786 ft/s (544m/s)
DRY v05 – 44mag 240gr JHP	1675 ft/s (511m/s)
COND. v50 – 44mag 240gr JHP	1853 ft/s (565m/s)
WET P-BFS Avg. – 357sig 125gr TMJ	28.5 mm
WET P-BFS Avg. – 44mag 240gr JHP	36.3 mm



<p>DX-III A</p> <p>DX SERIES</p> <p>In accordance with NIJ Standard-0101.06 Dated July 2008</p>
<p>SOFT BODY ARMOR SPECIFICATION</p> <p># EDN0042</p> <p>REV: 031210</p>
 

12. SPECIAL THREAT RESULTS:

DRY v50 – 9mm SXT 127gr +P+	1837 ft/s (560m/s)
WET P-BFS Avg. – 9mm SXT 127gr +P+	27.6 mm @ 1340 ft/s +/-30
DRY v50 – 5.7x28 FN SS195 HP 64gr	2588 ft/s (789m/s)
WET P-BFS Avg.– 5.7x28 FN SS195 HP 64gr	18 mm @ 2250 ft/s +/-30
*WET v50 - 2gr RCC	3215 ft/s (980m/s)
*WET v50 - 4gr RCC	2755 ft/s (840m/s)
*WET v50 - 16gr RCC	2265 ft/s (690m/s)
*DRY v50 - 17gr FSP	2126 ft/s (648m/s)
*WET v50 - 64gr RCC	1948 ft/s (594m/s)

*Tested in accordance with CO/PD 00-02H



DXF-III A
DXF SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0043

REV: 031210



1. **SCOPE:**

1.1. This specification fully describes the minimum requirements for furnishing concealable, bullet resistant, soft body armor. The intent is to purchase state of the art concealable body armor with optimum protection and wearability. The soft body armor alone shall provide a minimum of threat level IIIA ballistic protection as described by the National Institute of Justice's (NIJ) Standard-0101.06 dated July 2008 and be available in sizes C1 – C5. All armor provided must be in complete compliance with this specification, as well as provide compliance to the NIJ Standard for both labeling and ballistic performance. Only vests manufactured entirely in the United States will be accepted. Those vests that have any portion of the manufacturing process done outside the United States will be rejected.

2. **BALLISTIC PANEL CONSTRUCTION**

2.1. The ballistic panels shall be constructed of Woven Twaron (Para-Aramid Fiber – manufactured by Teijin Aramid High Performance Fabrics) and Dyneema (Ultra High Molecular Weight Polyethylene – manufactured by DSM). The ballistic panels for females shall be constructed in three sections, sized according to both bra and cup size and be available in cup sizes A through F. The department has selected these materials; any bids, which represent products manufactured from other materials, shall be rejected.

2.1.1. It is the intent of the agency to procure the lightest weight Level IIIA armor available in relation to areal density; therefore, the vest must not exceed 19.52oz. (1.22lb.) per square foot.

3. **BALLISTIC PANEL COVER MATERIAL**

3.1. Each ballistic panel shall be covered in 100% weldable urethane laminated 200 denier nylon.

4. **BALLISTIC PANEL PERFORMANCE**

4.1. Each bidder must submit the summary of results for both P-BFS and BL testing reports for the vest being offered. The v50's must be performed in accordance with NIJ Standard-0101.06. All tests must be performed on clay backings by independent testing facilities approved by the NIJ. The purpose of the test is to establish a "benchmark" v50 and assure the quality of the combined ballistic materials lot by lot. Subsequent test results must remain within +/- 6%, the normal statistical variation for v50 testing and remain within these limits for the five year service life of the vest.



DXF-III A
DXF SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0043
REV: 031210



5. **OTHER MATERIALS:**

5.1. All materials shall be new, unused, and without flaws which adversely affect appearance, durability and function.

5.1.1. **Thread** - The thread for all stitching shall be Kevlar, TEX 105, with a minimum of 5 stitches per inch.

5.1.2. **Loop Fasteners** - 1.5" Heat loop activated woven hook pieces must be utilized to suspend the armor panels inside the carrier system to prevent sagging.

6. **VEST IDENTIFICATION LABELS:**

6.1. Vests shall be labeled in accordance with NIJ Standard-0101.06. The label material shall be suitable to assure that the label itself shall withstand wear and/or laundering. The label shall remain readable during the guaranteed life of the outer shell and ballistic panels.

7. **LEVEL OF BALLISTIC PROTECTION:**

7.1. Each garment provided under this document shall provide **Type IIIA** ballistic impact protection against both penetration and serious bodily injury as defined by NIJ Standard-0101.06. Each garment submitted shall be approved by the NIJ and Body Armor Compliance Testing Program.

8. **VENDOR QUALITY ASSURANCE PROGRAM:**

8.1. Successful manufacturer shall maintain a quality control system in accordance with ISO9001:2008 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

9. **PRODUCT LIABILITY INSURANCE:**

9.1. Upon award successful manufacturer shall provide proof of having product liability insurance in the amount of twenty-five million dollars prior to the date of bid opening and shall remain in effect for the duration of the contract.

10. **MINIMUM REQUIREMENTS:**

10.1. The specifications described herein shall be deemed the minimum standards acceptable by this agency. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to page and paragraph. This document will be submitted with the completed bid package.



PROTECTIVE PRODUCTS

DXF-III A
DXF SERIES

In accordance with
NIJ Standard-0101.06 Dated July 2008

SOFT BODY ARMOR SPECIFICATION

EDN0043

REV: 031210



11. TECHNICAL SPECIFICATIONS:

MANUFACTURER	Protective Products
SERIES	DXF
NIJ MODEL #	DXF-III A
NIJ THREAT LEVEL	III A
NIJ CERTIFICATION SIZES	C1 – C5
BALLISTIC MATERIAL	Twaron / Dyneema
WEIGHT	1.22 psf
THINNESS	.29 in (7.37mm)
DRY v50 – 357sig 125gr TMJ	1996 ft/s (608m/s)
DRY v05 – 357sig 125gr TMJ	1843 ft/s (561m/s)
COND. v50 – 357sig 125gr TMJ	1852 ft/s (565m/s)
DRY v50 – 44mag 240gr JHP	1834 ft/s (559m/s)
DRY v05 – 44mag 240gr JHP	1592 ft/s (485m/s)
COND. v50 – 44mag 240gr JHP	1718 ft/s (524m/s)
WET P-BFS Avg. – 357sig 125gr TMJ	29.1 mm
WET P-BFS Avg. – 44mag 240gr JHP	37.2 mm

Protective Products warrants that the above mentioned NIJ Model meets the designated threat level.

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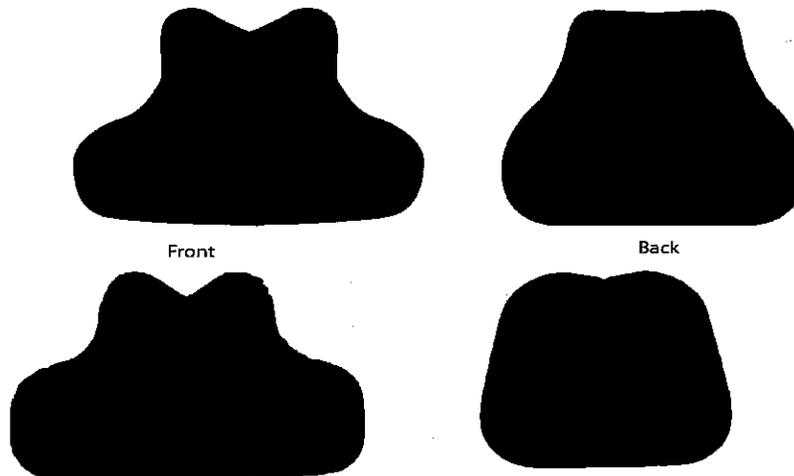


PYTHON Supplex Carrier
TACTICAL CARRIER SPECIFICATION # RD100005 REV: 031210
 

1. CONFIGURATION:

1.1. The vest provided shall be of a concealable, undershirt type bullet-resistant protection. Each vest shall be of a slip on construction and must be adjustable at 4 or 6 points in the chest, shoulder, and waist areas. Each vest is to be cut with sufficient armhole room so as not to irritate, or restrict the wearer from performing "normal" duties. The front ballistic panel shall leave enough room between the vest and the duty belt so as not to cause "push up" under the chin when the wearer is seated in an automobile. Each model vest delivered shall provide front, back, and side protection. The offered vest shall provide front protection from just below the collarbone at each shoulder and have a scooped neck to allow concealment in a standard open collar uniform shirt. Side protection shall be attained from the front and back panels wrapping around the torso and meeting at the side of the body. Agencies requiring greater side protection can request a coverage style that provides side protection from the front panel wrapping to the back allowing the panels to meet at the back side of the torso. This design provides extended coverage for officers trained in the Weaver stance. There must be a pouch located on the upper midsection of the outside front of the carrier to accommodate a 5" x 8" to 7" x 9" trauma reduction device. Protection from the back panel will be attained from an area even with the shoulder blade and having a lesser scooped neck for maximum protection, extend toward and around the waist just above the duty belt. All corners of the vest must be rounded to avoid chaffing of the body.

1.2.



The delivered vest shall be available in both male and female versions. Each version shall be designed to assure optimum fit for the gender for which it is intended.



PYTHON

Supplex Carrier

TACTICAL CARRIER SPECIFICATION

RD100005

REV: 031210



2. OUTER SHELL / CARRIER:

2.1. Each individual piece of soft body armor must be provided with a removable cover in order to allow the removal of the ballistic components when laundering the outer shell or carrier. Each front and back vest carrier shall be pocket shaped to securely retain the ballistic panels. The pockets shall have a hook and loop closure at least 3 inches from the bottom of the pocket for easy insertion and removal of the ballistic panels. The outer carrier fabric shall be Supplex. The body side shall be made of moisture – wicking microfilament with a brushed suede finish for comfort and durability. The straps shall be constructed of woven elastic for the ultimate in ergonomic comfort. The closure system shall be configured in a 4 or 6-point adjustable design.

3. SIZING:

3.1. Sizes provided must be consistent with established garment industry standards. Due to this agency's requirements for consistent fit among the various shapes offered to its personnel, each individual shaped vest as described in sections 2.1 and 2.2 of this specification must meet the "length" and "width" requirements as set forth by garment industry standards. Measurements will be taken for each wearer, and the measurements will be translated into industry standard sizes ranging from XS – XL. For extreme cases where the measurements fall outside the standard range, custom adjustments can be made, but surcharges may apply.

4. COLOR:

4.1. Each vest color will be determined by the agency.

5. OTHER MATERIALS:

5.1. All materials shall be new, unused, and without flaws which adversely affect appearance, durability and function.

5.1.1. **Thread** - The thread for all stitching shall be nylon, conforming to MIL-T-43548, and be compatible with the carrier fabric specified above. Size is to be appropriate for the expected usage, and shall not shrink during cleaning so as not to cause "puckering of the materials".

5.1.2. **Hook & Loop Fasteners** - Plastic fastener tape of the hook and loop type shall be used. Widths of 5/8" thru 6" may be used in the construction of the vests.

5.1.3. **Webbing/Elastic** – Webbing conforming to Mil-W-17337 shall be used in the construction of the drag strap.



PYTHON Supplex Carrier
TACTICAL CARRIER SPECIFICATION # RD100005 REV: 031210
 

6. **VEST IDENTIFICATION LABELS:**

6.1. Vests shall be labeled in accordance with NIJ standards. The label material shall be suitable to assure that the label itself shall withstand wear and/or laundering. The label shall remain readable during the guaranteed life of the outershell.

7. **VENDOR QUALITY ASSURANCE PROGRAM:**

7.1. Successful manufacturer shall maintain a quality control system in accordance with ISO 9001:9008 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

8. **PRODUCT LIABILITY INSURANCE:**

8.1. Upon award successful manufacturer shall provide proof of having product liability insurance in the amount of twenty-five million dollars prior to the date of bid opening and shall remain in effect for the duration of the contract.

9. **MINIMUM REQUIREMENTS:**

9.1. The specifications described herein shall be deemed the minimum standards acceptable by this agency. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to page and paragraph. This document will be submitted with the completed bid package.

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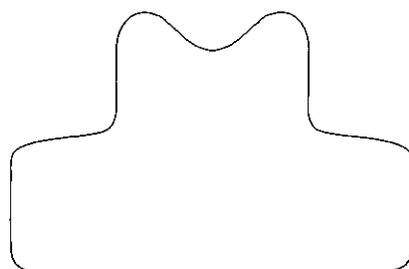


MLBV Molle Load Bearing Vest
Tactical Carrier Specification # RD100001
 

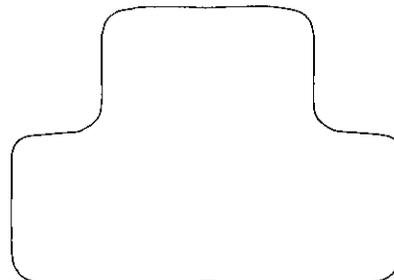
1. CONFIGURATION:

1.1. The vest provided is designed for high-speed special operations use offering a maximum amount of coverage yet allowing for comfort and mobility. Each vest shall be of a slip on construction with adjustable shoulder and waist, cut with sufficient armhole room so as to not irritate or restrict the wearer from performing "normal" duties. Each vest delivered shall provide front and back protection with the front and rear panels meeting over the collarbone. The offered vest shall provide front protection from the collarbone at each shoulder and have a scooped neck to allow for ease of donning and extend down to the waist. Side protection shall be attained from the front and back panels wrapping around allowing the panels to overlap at the side of the torso. The front and back panels must overlap at the sides and are secured to the body with a mating hook and loop fastening and can be further secured with an optional strap and buckle system. Addition protection may be inserted into a series of pockets on the ballistic suspension system. These include but are not limited to; soft trauma pack, speed plate or rigid trauma plate. The internal ballistic suspension system allows for the optimum adjustment of the ballistic panels providing greater comfort and protection for the wearer. Each vest will have a permanent drag strap for officer down extraction. The carrier incorporates a series of 1" webbing on both the front and back panels which allows for infinity adjustable load management. Pockets pouches and other accessories can be secured to this webbing and arranged to best meet the needs of the operation. All corners of the vest must be rounded to avoid chaffing of the body.

1.2. .



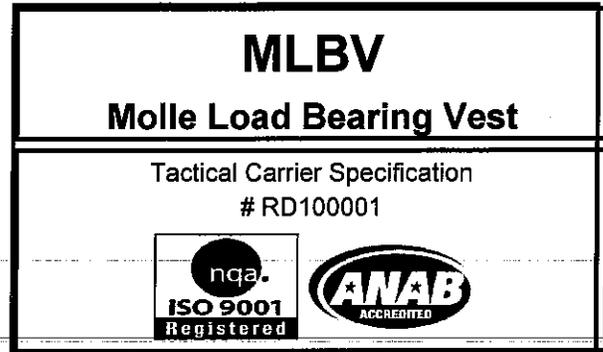
Front Panel



Rear Panel

1.3.

1.4. There are to be 2 removable ID patches (1 front, 1 rear) on Cordura™ with 2" inch tall block lettering to read as specified by agency.



2. **OUTER SHELL / CARRIER:**

2.1. Each individual piece of soft body armor must be covered in removable 500 denier Cordura™ nylon for high abrasion resistance and the body side must incorporate a mesh liner to provide ventilation and moisture drainage. Any vest with visible signs of fabric or color flaws will be rejected.

3. **SIZING:**

3.1. Sizes provided must be consistent with established garment industry standards. Due to this agency's requirements for consistent fit among the various shapes offered to its personnel, each individual shaped vest as described in sections 2.1 and 2.2 of this specification must meet the "length" and "width" requirements as set forth by garment industry standards. Measurements will be taken for each wearer, and the measurements will be translated into industry standard sizes ranging from Small to X-Large. For extreme cases where the measurements fall outside the standard range, custom adjustments can be made, but surcharges may apply.

4. **COLOR:**

4.1. Each tactical vests color will be determined by the agency.

5. **OTHER MATERIALS:**

5.1. All materials shall be new, unused, and without flaws which adversely affect appearance, durability and function.

5.1.1. **Thread** - The thread for all stitching shall be nylon, conforming to MIL-T-43548, and be compatible with the carrier fabric specified above. Size is to be appropriate for the expected usage, and shall not shrink during cleaning so as not to cause "puckering of the materials".

5.1.2. **Hook & Loop Fasteners** - Plastic fastener tape of the hook and loop type shall be used. Widths of 5/8" thru 6" may be used in the construction of the vests.

5.1.3. **Webbing/Elastic** - Webbing conforming to Mil-W-17337 shall be used in the construction of the drag strap. Molle-type webbing will conform to Mil-W-43668 in 1" width and shall be used to form the modular rows.

6. **VEST IDENTIFICATION LABELS:**

6.1. Vests shall be labeled in accordance with N.I.J. standards. The label material shall be suitable to assure that the label itself shall withstand wear and/or laundering. The label shall remain readable during the guaranteed life of the outer shell and ballistic panels.



MLBV Molle Load Bearing Vest
Tactical Carrier Specification # RD100001
 

7. **VENDOR QUALITY ASSURANCE PROGRAM:**

7.1. Successful manufacturer shall maintain a quality control system in accordance with ISO 9001 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

8. **PRODUCT LIABILITY INSURANCE:**

8.1. Upon award successful manufacturer shall provide proof of having product liability insurance in the amount of twenty million dollars prior to the date of bid opening and shall remain in effect for the duration of the contract.

9. **MINIMUM REQUIREMENTS:**

9.1. The specifications described herein shall be deemed the minimum standards acceptable by this agency. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to page and paragraph. This document will be submitted with the completed bid package.

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SPEED PLATE SERIES

Reference Hard Armor Drawings
10024 and 10025
REV: 090310



1. **SCOPE:**

1.1. This specification fully describes the minimum requirements for furnishing multi-curved, bullet resistant, body armor upgrade plates in multiple sizes. Single-curve plates specifically for female personnel are also defined. The intent is to purchase state-of-the-art concealable plates with optimum protection and wearability. The hard plates shall provide the minimum levels of ballistic protection indicated in Paragraph 9 when tested in accordance with the National Institute of Justice's (NIJ) Standard-0108.01. Additionally, the plates shall provide the level of spike/stab protection indicated in Paragraph 9 when evaluated per NIJ Standard-0115.00. All plates provided must be in complete compliance with this specification. Only plates manufactured entirely in the United States will be accepted. Those plates that have any portion of the manufacturing process done outside the United States will be rejected.

2. **BALLISTIC PLATE CONSTRUCTION**

2.1. The ballistic plates shall be constructed of 100% HB25 or HB26 Dyneema (Ultra High Molecular Weight Polyethylene) manufactured by DSM, consolidated under the precise pressure and temperature process cycle defined by the raw material manufacturer. These materials and processing protocols have been specifically selected for their particular performance characteristics in this application; any bids, which represent products manufactured from other materials, shall be rejected.

2.1.1. It is the intent to procure the lightest weight plates that conform to the requirements of this specification. The Dyneema component of the plates must not exceed 20.80 ounces (1.30 pounds) per square foot

3. **BALLISTIC PLATE COVER MATERIAL**

3.1. Each ballistic panel shall be covered in 420 denier nylon bonded to the Dyneema core, with all exposed seams fully "welded" closed.

4. **BALLISTIC PLATE PERFORMANCE**

4.1. The plates shall provide the minimum levels of ballistic performance and spike/stab protection as defined in Paragraph 9.

4.1.1. If requested, each bidder must submit evidence of the performance capabilities of the offered plates to demonstrate compliance with the required ballistic protection levels of Paragraph 9.



SPEED PLATE SERIES

Reference Hard Armor Drawings
10024 and 10025
REV: 031210



5. PLATE IDENTIFICATION LABELS:

5.1. Plates shall be permanently labeled with the manufacturer's name and address and the specific plate part number, manufacturing lot, manufacturing date, and serial number. Additionally, the label shall specify care instructions for the plate, and list the exact performance levels as indicated in Paragraph 9. The label material shall be suitable to assure that the label remains affixed to the plate throughout normal wear and cleaning. The label shall remain legible during the service life of the plate.

6. VENDOR QUALITY ASSURANCE PROGRAM:

6.1. Successful manufacturer shall maintain a quality control system in accordance with ISO9001:2008 standards. Proof of registration is required. The quality assurance program must insure appropriate levels of quality throughout all areas of contract performance. This program provides for the prevention and early detection of discrepancies and for timely and positive corrective action.

7. PRODUCT LIABILITY INSURANCE:

7.1. The manufacturer shall provide the appropriate level of product liability insurance which shall remain in effect for the service life of the plate.

8. MINIMUM REQUIREMENTS:

8.1. The characteristics described herein shall be deemed the minimum acceptable standards for the plates. Any discrepancies or deviations from these specifications shall be furnished in a separate document, listed in order and have reference to the specific paragraph(s) of this document.

9. TECHNICAL SPECIFICATIONS:

MANUFACTURER: Protective Products
BALLISTIC MATERIAL: 100% HB25 or HB26 Dyneema
BALLISTIC MATERIAL WEIGHT: 1.30 psf
THINNESS: .030 inches (7.6mm)



SPEED PLATE SERIES

Reference Hard Armor Drawings
 10024 and 10025
 REV: 031210




Threats defeated per NIJ Standard-0108.01 Stand Alone

- .357 Sig Speer 125 grain GDHP at 1410 fps
- FN 5.7x28mm 40 grain JHP at 2072 fps
- FN 5.7x28mm 40 grain V-Max at 1729 fps
- 9mm Fiocchi 115 grain FMJ at 1150 fps
- 9mm Winchester Ranger 127 grain SXT +P+ at 1250 fps
- .40 cal Aguila IQ 95 grain HP at 1500 fps
- Tokarev 7.62x25 Foreign 85 grain FMJ (Steel Jacket) at 1540 fps
- Tokarev 7.62x25 S&B 85 grain FMJ (Steel Jacket) at 1600 fps
- Tokarev 7.62x25 Norinco 85 grain FMJ (Steel jacket) at 1520 fps

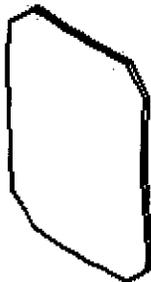
Threats defeated per NIJ Standard-0108.01 in conjunction with Level II Vest

- .357 Sig Corbon 115 grain JHP at 1540 fps
- .30 Cal Carbine 110 grain FMJ at 2030 fps
- 12 Gauge Winchester 1 oz Hollow Point Rifled Slug at 1600 fps

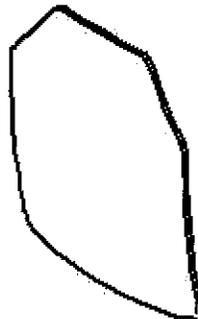
Threats defeated per NIJ Standard-0115.00

- Spike Protection Level 1 E1 at 24.2 J
- Spike Protection Level 1 E2 at 36.2 J

Configurations and Sizes



5"x7", 6"x8", and 7"x9"
Multi-Curve SPEED Plate



8"x10", 9"x11", and 10"x12"
Multi-Curve SPEED Plate



5"x7" and 6"x8"
Female SPEED Plate
(Single-Curve)

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<p>2518</p> <p>HARD ARMOR SERIES</p> <p>In accordance with NIJ Standard 0101.04 dated September 2000 and NIJ 2005 Interim Compliant</p>
<p>HARD ARMOR PART NUMBER</p> <p># 2518</p> <p>REV: 120110</p>
 

TECHNICAL SPECIFICATIONS:

MANUFACTURER	Protective Products Enterprises
SERIES	Hard Armor Plate
MODEL #	2518
NIJ THREAT LEVEL	III / IV
STAND ALONE / IN-CONJUNCTION	In-Conjunction (with NIJ IIIA soft armor)
CURVATURE	Multi
DESCRIPTION	Alumina / Aramid
SIZE	10" x 12"
WEIGHT	6.4 lbs
THINNESS	.7 in (16.5mm)

Protective Products warrants that the above mentioned NIJ Model meets the designated threat level.

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ADI-SA304
HARD ARMOR SERIES

In accordance with
 NIJ Standard-0101.04 and in compliance with NIJ
 2005 Interim Requirements Dated September 2000

HARD ARMOR PART NUMBER
 # ADI-SA304




TECHNICAL SPECIFICATIONS:

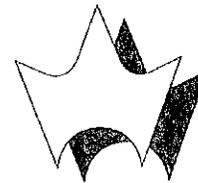
MANUFACTURER	ADI
SERIES	Hard Armor Plate
NIJ MODEL #	ADI-SA304
NIJ THREAT LEVEL	III
STAND ALONE / IN-CONJUNCTION	Stand Alone
CURVATION	Multi
DESCRIPTION	100% Polyethylene
SIZE	10" x 12"
WEIGHT	3.2 lbs
THINNESS	1.0" (25.4mm)
V50 – 7.62 M80 BALL	3011 fps (918m/s)
BFS Avg. – 7.62 M80 BALL	32 mm

Protective Products warrants that the above mentioned NIJ Model meets the designated threat level.

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H.P. WHITE LABORATORY, INC.

3114 Scarboro Road
Street, Maryland 21154-1822
Telephone: (410) 838-6550
Facsimile: (410) 838-2802
Email: info@hpwhite.com
www.hpwhite.com



24 September 2009
(HPWLI 11050-61E)

Protective Products International

1649 NW 136th Avenue
Sunrise, Florida 33323

Attention: Mr. Mike Slate

In accordance with your instructions, H.P. White Laboratory, Inc. conducted Ballistic Limit, Protection (V50BL[P]) testing of five proprietary panels, identified as Model DX-II, received 9 September 2009, via United Parcel Service.

Testing was conducted in accordance with your instructions, and the modified V50 provisions of NIJ-STD-0101.06, using caliber 9mm WIN, 127 grain, SXT+P+ ammunition. The test samples were mounted on an indoor range 17.3 feet from the muzzle of a test barrel to produce zero degree obliquity impacts. Photoelectric lumiline screens were positioned at 6.5 and 11.5 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 9.0 feet forward of the muzzle. Table I presents a summary of the enclosed data records.

This report is based on data obtained from having tested only the samples submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test samples are being returned via United Parcel Service. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Sincerely,

H. P. WHITE LABORATORY, INC.

Ray McBride

RM/tc
Enclosure

Protective Products International
 Attention: Mr. Mike Slate
 HPWLI 11050-61E
 24 September 2009

Table I. Summary of Results (V50)

Insert				Ballistic Threat			Ballistic Results (fps)		
Condition	Sample Number	Size	Weight (lbs)	Projectile Threat	Obliquity (degrees)	Shots (total)	V50	High Partial	Low Complete
Ambient	HPW-1	C-5	3.29	9mm-SXT	0	12/8	1606	1624	1546
	HPW-2	C-5	3.37	9mm SXT	0	12/6	1578	1610	1541
	HPW-3	C-5	3.32	9mm SXT	0	12/8	1641	1647	1626
	HPW-4	C-5	3.36	9mm SXT	0	12/8	1596	1591	1605
	HPW-5	C-5	3.31	9mm SXT	0	12/10	1599	1613	1591

(a) See data records for individual shot information



H.P. White Laboratory, Inc.

PROTECTION BALLISTIC LIMIT TEST, V50 BL(P)

Client : PROTECTIVE PRODUCTS INTERNATIONAL

Job No. : 11050-61

Test Date : 9/21/09

TEST PANEL

Manufacturer : PROTECTIVE PRODUCTS INTERNATIONAL Sample No. : HPW-1 (9mm SXT-II)
 Size : C-5 Heat No. : NA Date Rec'd. : 09-09-09
 Thicknesses : NA Weight : 3.29 lbs. Via : UPS
 Avg. Thick. : NA Hardness : NA Returned : UPS
 Required BL(P) : Plies/Laminates : NA
 Description : PROPRIETARY

MODEL# DX-II, SERIAL# 0163959, LOT# 0909, (FRONT)

SET-UP

Shot Spacing : PER-NIJ-STD 0101.06 LEVEL II Primary Vel. Screens : 6.5 ft., 11.5 ft. Range No. : 2
 Witness Panel : CLAY Primary Vel. Location : 9.0 ft. From Muzzle Temp. : 65 F
 Obliquity : 0 deg. Residual Vel. Screens : NA BP : 29.90 in. Hg
 Backing Material : 5.5" CLAY Residual Vel. Location : NA RH : 54%
 Conditioning : AMBIENT Range to Target : 17.3 ft. Barrel No./Gun : 9mm R/9
 Target to Wit. : 0.0 in. Gunner : BALL
 Recorder : B. WILLIAMSON

AMMUNITION

Projectile : 9mm WIN. SXT +P+, 127 gr. Lot No. : 27WK02
 Powder : ACC# 2

APPLICABLE STANDARDS OR PROCEDURES

- (1): PER-NIJ-STD 0101.06 (MODIFIED)
- (2): PRE-TEST CLAY DROPS: 21mm, 20mm, 21mm, 21mm, 21mm
- (3): PRE-TEST CLAY TEMP: 102.1F

Shot No.	Powder/Seating	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V50	Footnotes
1		3581	1396	3581	1396	1396	P		
2		3131	1597	3135	1595	1596	P	Y	
3		2960	1689	2964	1687	1688	C		
4		3126	1599	3131	1597	1598	C	Y	
5		3324	1504	3333	1500	1502	P		
6		3122	1602	3126	1599	1601	C	Y	
7		3234	1546	3234	1546	1546	C	Y	
8		3333	1500	3338	1498	1499	P		
9		3131	1597	3140	1592	1595	P	Y	
10		3077	1625	3081	1623	1624	P	Y	
11		2996	1669	3000	1667	1668	C	Y	
12		3077	1625	3081	1623	1624	P	Y	

REMARKS :

FOOTNOTES :

V50 SUMMARY :

No. Points : 4 & 4
 V50 : 1606
 High Partial : 1624
 Low Complete : 1546
 Range of Results : 122
 Range of Mixed : 78



H.P. White Laboratory, Inc.

PROTECTION BALLISTIC LIMIT TEST, V50 BL(P)

Client : PROTECTIVE PRODUCTS INTERNATIONAL

Job No. : 11050-61

Test Date : 9/21/09

TEST PANEL

Manufacturer : PROTECTIVE PRODUCTS INTERNATIONAL Sample No. : HPW-3 (9mm SXT-II)
 Size : C-5 Heat No. : NA Date Rec'd. : 09-09-09
 Thicknesses : NA Weight : 3.32 lbs. Via : UPS
 Avg. Thick. : NA Hardness : NA Returned : UPS
 Required BL(P) : Plies/Laminates : NA
 Description : PROPRIETARY
 MODEL# DX-II, SERIAL# 0163965, LOT# 0909, (FRONT)

SET-UP

Shot Spacing : PER-NIJ-STD 0101.06 LEVEL II Primary Vel. Screens : 6.5 ft., 11.5 ft. Range No. : 2
 Witness Panel : CLAY Primary Vel. Location : 9.0 ft. From Muzzle Temp. : 68 F
 Obliquity : 0 deg. Residual Vel. Screens : NA BP : 30.24 in. Hg
 Backing Material : 5.5" CLAY Residual Vel. Location : NA RH : 55%
 Conditioning : AMBIENT Range to Target : 17.3 ft. Barrel No./Gun : 9mm R/2
 Target to Wit. : 0.0 in. Gunner : SUTTON
 Recorder : ADAMS

AMMUNITION

Projectile : 9mm WIN. SXT +P+, 127 gr. Lot No. : 27WK02
 Powder : ACC# 2

APPLICABLE STANDARDS OR PROCEDURES

- (1): PER-NIJ-STD 0101.06 (MODIFIED)
- (2): PRE-TEST CLAY DROPS: 19mm, 19mm, 18mm, 19mm, 18mm
- (3): PRE-TEST CLAY TEMP: 102.4F

Shot No.	Powder/Seating	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V50	Footnotes
1		3603	1388	3608	1386	1387	P		
2		3266	1531	3266	1531	1531	P		
3		3041	1644	3045	1642	1643	C	Y	
4		3167	1579	3171	1577	1578	P		
5		3077	1625	3077	1625	1625	P	Y	
6		3032	1649	3041	1644	1647	P	Y	
7		2883	1734	2888	1731	1733	C		
8		2987	1674	2987	1674	1674	C	Y	
9		3072	1628	3077	1625	1626	C	Y	
10		3140	1592	3144	1590	1591	P	Y	
11		3055	1637	3063	1632	1635	P	Y	
12		2960	1689	2964	1687	1688	C	Y	

REMARKS :

FOOTNOTES :

V50 SUMMARY :

No. Points : 4 & 4
 V50 : 1641
 High Partial : 1647
 Low Complete : 1626
 Range of Results : 97
 Range of Mixed : 21



H.P. White Laboratory, Inc.

PROTECTION BALLISTIC LIMIT TEST, V50 BL(P)

Client : PROTECTIVE PRODUCTS INTERNATIONAL

Job No. : 11050-61

Test Date : 9/21/09

TEST PANEL

Manufacturer : PROTECTIVE PRODUCTS INTERNATIONAL Sample No. : HPW-4 (9mm SXT-II)
 Size : C-5 Heat No. : NA
 Thicknesses : NA Weight : 3.36 lbs.
 Avg. Thick : NA Hardness : NA
 Required BL(P) : Plies/Laminates : NA
 Description : PROPRIETARY

Date Rec'd. : 09-09-09
 Via : Federal Express
 Returned : Federal Express

MODEL# DX-II, SERIAL# 0163970, LOT# 0909, (BACK)

SET-UP

Shot Spacing : PER-NIJ-STD 0101.06 LEVEL II
 Witness Panel : CLAY
 Obliquity : 0 deg.
 Backing Material : 5.5" CLAY
 Conditioning : AMBIENT

Primary Vel. Screens : 6.5 ft., 11.5 ft.
 Primary Vel. Location : 9.0 ft. From Muzzle
 Residual Vel. Screens : NA
 Residual Vel. Location : NA
 Range to Target : 17.3 ft.
 Target to Wit. : 0.0 in.

Range No. : 2
 Temp. : 68 F
 BP : 30.24 in. Hg
 RH : 55%
 Barrel No./Gun : 9mm R/2
 Gunner : SUTTON
 Recorder : ADAMS

AMMUNITION

Projectile : 9mm WIN. SXT +P+, 127 gr.
 Powder : ACC# 2

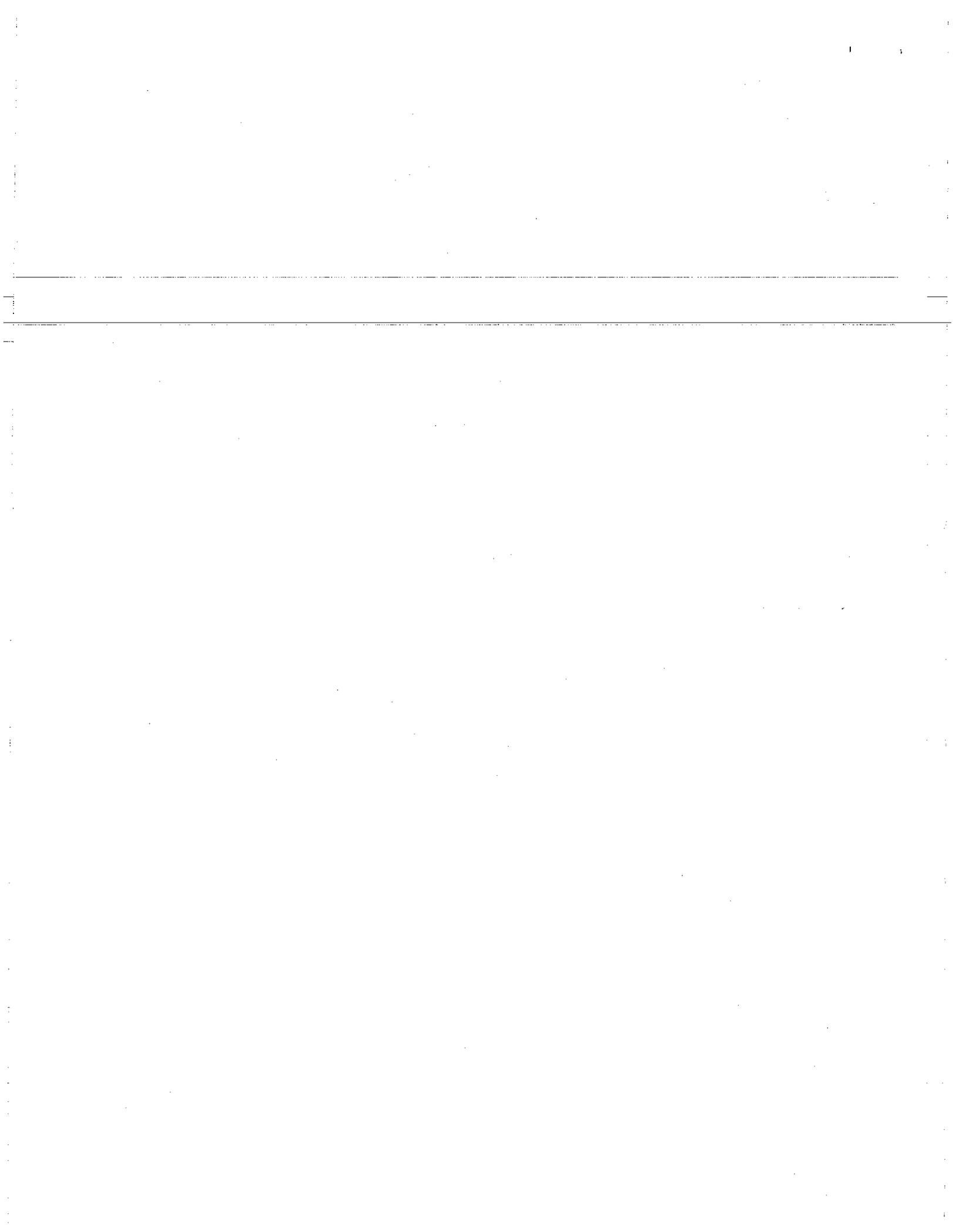
Lot No. : 27WK02

APPLICABLE STANDARDS OR PROCEDURES

- (1) : PER-NIJ-STD 0101.06 (MODIFIED)
- (2) : PRE-TEST CLAY DROPS: 18mm, 18mm, 18mm, 17mm, 19mm
- (3) : PRE-TEST CLAY TEMP: 100.6F

Shot No.	Powder/Seating	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V50	Footnotes
1		3702	1351	3708	1348	1350	P		
2		3520	1420	3523	1419	1420	P		
3		3162	1581	3167	1579	1580	P	Y	
4		3009	1662	3016	1658	1660	C		
5		3140	1592	3144	1590	1591	P	Y	
6		3045	1642	3050	1639	1641	C	Y	
7		3086	1620	3090	1618	1619	C	Y	
8		3270	1529	3270	1529	1529	P		
9		3162	1581	3167	1579	1580	P	Y	
10		3095	1616	3104	1611	1613	C	Y	
11		3113	1606	3117	1604	1605	C	Y	
12		3252	1538	3252	1538	1538	P	Y	

REMARKS :	FOOTNOTES :	V50 SUMMARY : No. Points : 4 & 4 V50 : 1596 High Partial : 1591 Low Complete : 1605 Range of Results : 103 Range of Mixed : 0
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H.P. WHITE LABORATORY, INC.

3114 Scarboro Road
Street, Maryland 21154-1822
Telephone: (410) 838-6550
Facsimile: (410) 838-2802
Email: info@hpwhite.com
www.hpwhite.com



24 September 2009
(HPWLI 11050-61F)

Protective Products International
1649 NW 136th Avenue
Sunrise, Florida 33323

Attention: Mr. Mike Slate

In accordance with your instructions, H.P. White Laboratory, Inc. conducted Ballistic Limit, Protection (V50BL[P]) testing of five proprietary panels, identified as Model DX-II, received 9 September 2009, via United Parcel Service.

Testing was conducted in accordance with your instructions, and the modified V50 provisions of NIJ-STD-0101.06, using caliber .357 SIG, 125 grain, GDHP ammunition. The test samples were mounted on an indoor range 17.3 feet from the muzzle of a test barrel to produce zero degree obliquity impacts. Photoelectric lumiline screens were positioned at 6.5 and 11.5 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 9.0 feet forward of the muzzle. Table I presents a summary of the enclosed data records.

This report is based on data obtained from having tested only the samples submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test samples are being returned via United Parcel Service. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Very truly yours,

H. P. WHITE LABORATORY, INC.

Ray McBride

RM/tc
Enclosure

Table I. Summary of Results (V50)

Insert				Ballistic Threat			Ballistic Results (fps)		
Condition	Sample Number	Size	Weight (lbs)	Projectile Threat	Obliquity (degrees)	Shots (total)	V50	High Partial	Low Complete
Ambient	HPW-1	C-5	3.30	.357 SIG	0	12/10	1632	1654	1612
	HPW-2	C-5	3.30	.357 SIG	0	12/10	1624	1648	1615
	HPW-3	C-5	3.34	.357 SIG	0	12/10	1596	1601	1589
	HPW-4	C-5	3.30	.357 SIG	0	12/10	1672	1728	1642
	HPW-5	C-5	3.35	.357 SIG	0	12/8	1686	1750	1641

(a) See data records for individual shot information

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST

Date Received: 8/24/09
 Via: Fed Ex
 Returned Via: UPS

Record No.: PPI09058
 Test Date: 8/25/09
 Customer: Protective Products International

Sample

Manufacturer: PPI
 Size: 15 x 15 in.
 No. of Plies: 30
 Weight: 1.99 lbs.
 Model No.: DX-II
 Sample No.: 2
 Lot No.: 0809
 Conditioning: Dry

Threat

Projectile: 22 Cal. FSP
 Weight: 17 gr.
 Powder: Bullseye
 Barrel: 28 inch
 Obliquity: 0 deg.
 Test Spec: CO/PD 00-02H

Range 1

Muzzle to Scr. 1: 4.58 ft.
 Screen 1 - 2: 5.73 ft.
 Screen 2 - Target: 4.25 ft.
 Target to Witness: 0.50 ft.
 Midpoint to Target: 7.12 ft.
 Witness Panel: 2024-T3 Alum.
 Temperature: 75 °F.
 Humidity: 59 %

SHOT No.	Powder	Chronograph 1		Chronograph 2		AVERAGE Velocity (fps)	Loss	Instrument	SHOT Incl.	Penetration	
		TIME sx-5	VELOCITY fps	TIME sx-5	VELOCITY fps					Complete	Partial
1	8.0	263.8	2171	187.8	2175	2173	90	2083	n	c	c
2	7.7	277.7	2063	197.6	2067	2065	86	1979	n	c	c
3	7.4	283.5	2020	201.8	2024	2022	84	1938	y	p	p
4	7.7	274.3	2088	195.2	2093	2090	87	2004	y	p	p
5	8.0	269.0	2129	191.4	2134	2132	88	2043	n	c	c
6	7.7	272.2	2104	193.7	2109	2107	87	2019	n	c	c
7	7.4	280.7	2041	199.8	2045	2043	85	1958	y	c	c
8	7.1	289.0	1982	205.7	1986	1984	82	1902	y	c	c
9	6.8	291.2	1967	207.3	1971	1969	82	1887	y	c	c
10	6.5	295.3	1940	210.2	1943	1942	81	1861	n	p	p
11	6.8	286.4	2000	203.8	2004	2002	83	1919	y	p	p
		-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-
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		-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	1935	2004	1887	117	117

Remarks/Notes

Sample secured using hydraulic frame and clamps.

V50 based on three partial and three complete penetrations.

Sample Description:

Layers 1-17: Flex woven aramid fiber (24x24).
 Layers 18-30: Smooth flex polyethylene film.

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST
DOPPLER RADAR

Date Received: 8/24/09
 Via: FedEx
 Returned Via: UPS

Record No: PPI09059
 Test Date: 8/26/09
 Customer: Protective Products International

Sample

Manufacturer: PPI
 Size: 15 x15 in.
 No. of Plies: 30
 Weight: 1.99 lbs.
 Model No.: DX-II
 Sample No.: 3
 Lot No.: 0809
 Conditioning: Wet

Threat

Projectile: RCC
 Weight: 2 gr.
 Powder: Bullseye
 Barrel Length: 26
 Obliquity: 0 deg.
 Test Spec:

Range 3

Muzzle to Target: 10.00 ft.
 Target to Witness: 0.50 ft.
 Witness Panel: 2024-T3 Alum.
 Temperature: 72 °F
 Humidity: 48 %

Shot Info.		Velocity Information		Penetration Results	
SHOT No.	Powder Charge	Muzzle f.p.s.	Striking f.p.s.	Include Shot	Complete Partial
1	5.5	3156	2760	n	c
2	5.2	3017	2618	y	p
3	5.4	3137	2738	y	p
4	5.6	3216	2812	n	c
5	5.5	3169	2743	y	c
6	5.3	3124	2732	y	c
7	5.1	3049	2652	y	p
8	5.2	3051	2692	y	c

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	2696	2738	2692	125	46

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.
 V50 based on three partial and three complete penetrations.

Sample Description:

Layers 1-17: Flex woven aramid fiber (24x24).
 Layers 18-30: Smooth flex polyethylene film.

Lutz/Nold

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST
DOPPLER RADAR

Date Received: 8/24/09
 Via: FedEx
 Returned Via: UPS

Record No: PPI09060
 Test Date: 8/26/09
 Customer: Protective Products International

<u>Sample</u>	<u>Threat</u>	<u>Range 3</u>
Manufacturer: PPI	Projectile: RCC	Muzzle to Target: 10.00 ft.
Size: 15 x15 in.	Weight: 2 gr.	Target to Witness: 0.50 ft.
No. of Plies: 30	Powder: Bullseye	Witness Panel: 2024-T3 Alum.
Weight: 2.01 lbs.	Barrel Length: 26 in	Temperature: 72 °F
Model No.: DX-II	Obliquity: 0 deg.	Humidity: 48 %
Sample No.: 4	Test Spec: CO/PD 00-02H	
Lot No.: 0809		
Conditioning: Wet		

Shot Info.		Velocity Information		Penetration Results	
SHOT No.	Powder Charge	Muzzle f.p.s.	Striking f.p.s.	Include Shot	Complete Partial
1	5.2	3078	2696	y	p
2	5.4	3098	2700	y	p
3	5.6	3159	2759	y	c
4	5.4	3096	2678	y	p
5	5.6	3116	2729	y	c
6	5.4	3190	2780	y	c

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	2724	2700	2729	102	-29

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.

V50 based on three partial and three complete penetrations.

Sample Description:

Layers 1-17: Flex woven aramid fiber (24x24).
 Layers 18-30: Smooth flex polyethylene film.

Lutz/Nold

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST
DOPPLER RADAR

Date Received: 8/24/09
 Via: FedEx
 Returned Via: UPS

Record No: PPI09061
 Test Date: 8/26/09
 Customer: Protective Products International

<u>Sample</u>	<u>Threat</u>	<u>Range 3</u>
Manufacturer: PPI	Projectile: RCC	Muzzle to Target: 10:00 ft.
Size: 15 x15 in.	Weight: 4 gr.	Target to Witness: 0.50 ft.
No. of Plies: 30	Powder: Bullseye	Witness Panel: 2024-T3 Alum.
Weight: 2.00 lbs.	Barrel Length: 26 in	Temperature: 72 °F
Model No.: DX-II	Obliquity: 0 deg.	Humidity: 48 %
Sample No.: 5	Test Spec: CO/PD 00-02H	
Lot No.: 0809		
Conditioning: Wet		

Shot Info.		Velocity Information		Penetration Results	
SHOT No.	Powder Charge	Muzzle f.p.s.	Striking f.p.s.	Include Shot	Complete Partial
1	4.6	2761	2490	y	c
2	4.4	2612	2355	n	p
3	4.5	2701	2434	y	c
4	4.4	2663	2403	y	p
5	4.5	2758	2494	n	c
6	4.4	2638	2367	y	p
7	4.5	2625	2369	y	p
8	4.6	2687	2428	y	c

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	2415	2403	2428	123	-25

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.

V50 based on three partial and three complete penetrations.

Sample Description:
 Layers 1-17: Flex woven aramid fiber (24x24).
 Layers 18-30: Smooth flex polyethylene film.

Lutz/Nold

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST
DOPPLER RADAR

Date Received: 8/24/09
 Via: FedEx
 Returned Via: UPS

Record No: PPI09062
 Test Date: 8/26/09
 Customer: Protective Products International

Sample	Threat	Range 3
Manufacturer: PPI	Projectile: RCC	Muzzle to Target: 10.00 ft.
Size: 15 x15 in.	Weight: 4 gr.	Target to Witness: 0.50 ft.
No. of Plies: 30	Powder: Bullseye	Witness Panel: 2024-T3 Alum.
Weight: 1.98 lbs.	Barrel Length: 26 in	Temperature: 72 °F
Model No.: DX-II	Obliquity: 0 deg.	Humidity: 48 %
Sample No.: 6	Test Spec: CO/PD 00-02H	
Lot No.: 0809		
Conditioning: Wet		

Shot Info.		Velocity Information		Penetration Results	
SHOT No.	Powder Charge	Muzzle f.p.s.	Striking f.p.s.	Include Shot	Complete Partial
1	4.8	2788	2545	n	c
2	4.6	2734	2466	y	p
3	4.8	2707	2433	y	c
4	4.6	2750	2477	y	c
5	4.4	2630	2390	y	p
6	4.5	2642	2402	y	p
7	4.6	2697	2430	y	c

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	2433	2466	2430	87	36

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.

V50 based on three partial and three complete penetrations.

Sample Description:

Layers 1-17: Flex woven aramid fiber (24x24).
 Layers 18-30: Smooth flex polyethylene film.

Lutz/Nold

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST

Date Received: 8/24/09
 Via: FedEx
 Returned Via: UPS

Record No: PPI09064
 Test Date: 08/26/09
 Customer: Protective Products Int'l

Sample

Manufacturer: PPI
 Size: 15 x 15 in.
 No. of Plies: 30
 Weight: 1.99 lbs.
 Model No.: DX-II
 Sample No: 8
 Lot No.: 0809
 Conditioning: Wet

Threat

Projectile: RCC
 Weight: 16 gr.
 Powder: Bullseye
 Barrel Length: 28 in.
 Obliquity: 0 deg.
 Test Spec: CO/PD 00-02H

Range 1

Muzzle to Scr. 1: 4.58 ft.
 Screen 1 - 2: 5.73 ft.
 Screen 2 - Target: 4.25 ft.
 Target to Witness: 0.50 ft.
 Midpoint to Target: 7.12 ft.
 Witness Panel: 2024-T3 Alum.
 Temperature: 72 °F.
 Humidity: 50 %

SHOT No.	Powder	Chronograph 1		Chronograph 2		AVERAGE Velocity (fps)	Loss	Instrument	Penetration	
		TIME sx-5	VELOCITY fps	TIME sx-5	VELOCITY fps				SHOT Incl.	Complete Partial
1	8.0	267.4	2142	190.3	2147	2144	114	2030	y	p
2	8.3	252.4	2269	179.5	2276	2273	121	2152	n	c
3	8.0	260.7	2197	185.6	2201	2199	117	2082	y	c
4	7.7	266.8	2147	189.9	2151	2149	114	2035	y	c
5	7.4	272.7	2100	194.1	2105	2103	112	1991	y	p
6	7.7	270.1	2121	192.3	2124	2122	113	2010	y	p
7	8.0	261.6	2190	186.2	2194	2192	117	2075	y	c
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50	HIGH	LOW	RANGE OF	RANGE OF
	VELOCITY	PARTIAL	COMPLETE	RESULTS	MIXED RESULTS
	2037	2030	2035	91	-4

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.

V50 based on three partial and three complete penetrations.

Sample Description:
 Layers 1-17: Flex woven aramid fiber (24x24).
 Layers 18-30: Smooth flex polyethylene film.

Crawford/Wilson

United States Test Laboratory, 7447 W 33rd St. N. Wichita, KS 67205 Ph. 316-832-1600 Fax 316-832-1602

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST

Date Received: 08/24/09
Via: FedEx
Returned Via: UPS

Record No.: PPI09065
Test Date: 08/26/09
Customer: Protective Products Int'l

Sample

Manufacturer: PPI
Size: 15 x 15 in.
No. of Plies: 30
Weight: 1.99 lbs.
Model No.: DX-II
Sample No.: 9
Lot No.: 0809
Conditioning: Wet

Threat

Projectile: RCC
Weight: 64-gr.
Powder: Bullseye
Barrel Length: 26 in.
Obliquity: 0 deg.
Test Spec.: CO/PD 00-02H

Range 1

Muzzle to Scr. 1: 4.75 ft.
Screen 1 - 2: 5.73 ft.
Screen 2 - Target: 4.25 ft.
Target to Witness: 0.50 ft.
Midpoint to Target: 7.12 ft.
Witness Panel: 2024-T3 Alum.
Temperature: 72 °F.
Humidity: 55 %

SHOT No.	Powder	Chronograph 1		Chronograph 2		AVERAGE Velocity (fps)	Loss	Instrument	Penetration	
		TIME sx-5	VELOCITY fps	TIME sx-5	VELOCITY fps				SHOT Incl.	Complete Partial
1	14.0	302.3	1895	215.0	1900	1897	73	1825	n	c
2	13.4	316.6	1809	225.1	1815	1812	69	1743	n	c
3	12.8	326.9	1752	231.8	1762	1757	67	1690	n	c
4	12.2	334.4	1713	237.9	1717	1715	66	1649	y	c
5	11.6	352.6	1625	249.9	1635	1630	62	1567	y	p
6	12.2	339.9	1685	242.5	1685	1685	65	1620	y	c
7	11.6	350.3	1635	249.9	1635	1635	63	1572	y	c
8	11.0	361.4	1585	257.4	1587	1586	61	1525	y	p
9	11.6	342.0	1675	243.0	1681	1678	64	1614	y	p
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	1591	1614	1572	124	41

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.
V50 based on three partial and three complete penetrations.

Sample Description:
Layers 1-17: Flex woven aramid fiber (24x24).
Layers 18-30: Smooth flex polyethylene film.

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST

Date Received: 08/24/09
Via: FedEx
Returned Via: UPS

Record No.: PPI09066
Test Date: 08/27/09
Customer: Protective Products Int'l

Sample		Threat		Range 1	
Manufacturer: PPI		Projectile: RCC		Muzzle to Scr. 1:	4.75 ft.
Size: 15 x 15 in.		Weight: 64 gr.		Screen 1 - 2:	5.73 ft.
No. of Plies: 30		Powder: Bullseye		Screen 2 - Target:	4.25 ft.
Weight: 1.99 lbs.		Barrel Length: 26 in.		Target to Witness:	0.50 ft.
Model No.: DX-II		Obliquity: 0 deg.		Midpoint to Target:	7.12 ft.
Sample No.: 10		Test Spec.: CO/PD 00-02H		Witness Panel:	2024-T3 Alum.
Lot No.: 0809				Temperature:	72 °F.
Conditioning: Wet				Humidity:	55 %

SHOT No.	Powder	Chronograph 1		Chronograph 2		AVERAGE Velocity (fps)	Loss	Instrument	Penetration	
		TIME sx-5	VELOCITY fps	TIME sx-5	VELOCITY fps				SHOT Incl.	Complete Partial
1	14.0	302.2	1895	215.0	1900	1898	73	1825	n	c
2	13.4	311.7	1838	222.4	1837	1837	70	1767	y	c
3	12.8	321.2	1783	229.3	1782	1782	68	1714	y	c
4	12.2	329.4	1739	234.1	1745	1742	67	1675	y	p
5	12.8	326.7	1753	232.2	1759	1756	67	1689	y	c
6	12.2	333.8	1716	237.3	1721	1719	66	1653	y	p
7	12.8	328.8	1742	233.7	1748	1745	67	1678	y	p
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	1696	1678	1689	114	-11

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.

V50 based on three partial and three complete penetrations.

Sample Description:
Layers 1-17: Flex woven aramid fiber (24x24).
Layers 18-30: Smooth flex polyethylene film.

H.P. WHITE LABORATORY, INC.

3114 Scarboro Road
Street, Maryland 21154-1822
Telephone: (410) 838-6550
Facsimile: (410) 838-2802
Email: info@hpwhite.com
www.hpwhite.com



24 September 2009
(HPWLI 11050-61G)

Protective Products International
1649 NW 136th Avenue
Sunrise, Florida 33323

Attention: Mr. Mike Slate

In accordance with your instructions, H.P. White Laboratory, Inc. conducted Ballistic Limit, Protection (V50BL[P]) testing of five proprietary panels, identified as Model DX-III A, received 9 September 2009, via Federal Express.

Testing was conducted in accordance with your instructions, and the modified V50 provisions of NIJ-STD-0101.06, using caliber 9mm WIN, 127 grain, SXT+P+ ammunition. The test samples were mounted on an indoor range 17.3 feet from the muzzle of a test barrel to produce zero degree obliquity impacts. Photoelectric lumiline screens were positioned at 6.5 and 11.5 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 9.0 feet forward of the muzzle. Table I presents a summary of the enclosed data records.

This report is based on data obtained from having tested only the samples submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test samples are being returned via United Parcel Service. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Very truly yours,

H. P. WHITE LABORATORY, INC.

A handwritten signature in black ink, appearing to read "Ray McBride", with a horizontal line extending to the right.

Ray McBride

RM/tc
Enclosure

Protective Products International
 Attention: Mr. Mike Slate
 HPWLI 11050-61G
 24 September 2009

Table I. Summary of Results (V50)

Insert				Ballistic Threat			Ballistic Results (fps)		
Condition	Sample Number	Size	Weight (lbs)	Projectile Threat	Obliquity (degrees)	Shots (total)	V50	High Partial	Low Complete
Ambient	HPW-1	C-5	4.50	9mm-SXT	0	12/4	1896	1884	1885
	HPW-2	C-5	4.57	9mm SXT	0	12/8	1752	1764	1755
	HPW-3	C-5	4.56	9mm SXT	0	12/8	1840	1841	1838
	HPW-4	C-5	4.46	9mm SXT	0	12/6	1858	1856	1841
	HPW-5	C-5	4.54	9mm SXT	0	12/6	1839	1862	1806

(a) See data records for individual shot information



H.P. White Laboratory, Inc.

PROTECTION BALLISTIC LIMIT TEST, V50 BL(P)

Client : PROTECTIVE PRODUCTS INTERNATIONAL

Job No. : 11050-61

Test Date : 9/10/09

TEST PANEL

Manufacturer : PROTECTIVE PRODUCTS INTERNATIONAL Sample No. : HPW-1 (9mm SXT-III A)
 Size : C-5 Heat No. : NA
 Thicknesses : NA Weight : 4.50 lbs.
 Avg. Thick. : NA Hardness : NA
 Required BL(P) : Plies/Laminates : NA
 Description : PROPRIETARY

Date Rec'd. : 09-09-09
 Via : Federal Express
 Returned : Federal Express

MODEL# DX-III A, SERIAL# 0163929, LOT# 0909. (FRONT)

SET-UP

Shot Spacing : PER-NIJ-STD 0101.06 LEVEL III A
 Witness Panel : CLAY
 Obliquity : 0 deg.
 Backing Material : 5.5" CLAY
 Conditioning : AMBIENT

Primary Vel. Screens : 6.5 ft., 11.5 ft.
 Primary Vel. Location : 9.0 ft. From Muzzle
 Residual Vel. Screens : NA
 Residual Vel. Location : NA
 Range to Target : 17.3 ft.
 Target to Wit. : 0.0 ft.

Range No. : 9
 Temp. : 66 F
 BP : 30.00 in. Hg
 RH : 59%
 Barrel No./Gun : 9mm R/9
 Gunner : BALL
 Recorder : ADAMS

AMMUNITION

Projectile : 9mm WIN. SXT +P+, 127 gr.
 Powder : ACC# 2

Lot No. : 27WK02

APPLICABLE STANDARDS OR PROCEDURES

- (1) : PER-NIJ-STD 0101.06 (MODIFIED)
- (2) : PRE-TEST CLAY DROPS: 17mm, 17mm, 18mm, 18mm, 17mm
- (3) : PRE-TEST CLAY TEMP: 100.7F

Shot No.	Powder/Seating	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V50	Footnotes
1		3761	1329	3775	1325	1327	P		
2		3364	1486	3363	1487	1487	P		
3		3191	1567	3191	1567	1567	P		
4		3070	1629	3070	1629	1629	P		
5		2908	1719	2908	1719	1719	P		
6		2778	1800	2777	1801	1800	P		
7		2682	1864	2682	1864	1864	P	Y	
8		2562	1952	2562	1952	1952	C	Y	
9		2653	1885	2653	1885	1885	C	Y	
10		2753	1816	2747	1820	1818	P		
11		2700	1852	2702	1850	1851	P		
12		2652	1885	2657	1882	1884	P	Y	

REMARKS :

FOOTNOTES :

V50 SUMMARY :

No. Points : 2 & 2
 V50 : 1896
 High Partial : 1884
 Low Complete : 1885
 Range of Results : 88
 Range of Mixed : 0



H.P. White Laboratory, Inc.

Client : PROTECTIVE PRODUCTS INTERNATIONAL

PROTECTION BALLISTIC LIMIT TEST, V50 BL(P)

Job No. : 11050-61

Test Date : 9/10/09

TEST PANEL

Manufacturer : PROTECTIVE PRODUCTS INTERNATIONAL Sample No. : HPW-3 (9mm SXT-IIIA)
 Size : C-5 Heat No. : NA Date Rec'd. : 09-09-09
 Thicknesses : NA Weight : 4.56 lbs. Via : Federal Express
 Avg. Thick. : NA Hardness : NA Returned : Federal Express
 Required BL(P) : Plies/Laminates : NA
 Description : PROPRIETARY

MODEL# DX-IIIA, SERIAL# 0163947, LOT# 0909. (BACK)

SET-UP

Shot Spacing : PER-NIJ-STD 0101.06 LEVEL IIIA Primary Vel. Screens : 6.5 ft., 11.5 ft. Range No. : 9
 Witness Panel : CLAY Primary Vel. Location : 9.0 ft. From Muzzle Temp. : 66 F
 Obliquity : 0 deg. Residual Vel. Screens : NA BP : 30.00 in. Hg
 Backing Material : 5.5" CLAY Residual Vel. Location : NA RH : 59%
 Conditioning : AMBIENT Range to Target : 17.3 ft. Barrel No./Gun : 9mm R/9
 Target to Wit. : 0.0 in. Gunner : BALL.
 Recorder : ADAMS

AMMUNITION

Projectile : 9mm WIN. SXT +P+, 127 gr. Lot No. : 27WK02
 Powder : ACC# 2

APPLICABLE STANDARDS OR PROCEDURES

- (1) : PER-NIJ-STD 0101.06 (MODIFIED)
- (2) : PRE-TEST CLAY DROPS: 20mm, 20mm, 20mm, 18mm, 18mm
- (3) : PRE-TEST CLAY TEMP: 101.9F

Shot No.	Powder/Seating	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V50	Footnotes
1		3712	1347	3712	1347	1347	P		
2		3249	1539	3240	1543	1541	P		
3		2909	1719	2910	1718	1719	P		
4		2694	1856	2694	1856	1856	C	Y	
5		2784	1796	2778	1800	1798	P	Y	
6		2719	1839	2713	1843	1841	P	Y	
7		2647	1889	2647	1889	1889	C	Y	
8		2721	1838	2721	1838	1838	C	Y	
9		2794	1790	2799	1786	1788	P	Y	
10		2719	1839	2720	1838	1839	P	Y	
11		2629	1902	2634	1898	1900	C		
12		2670	1873	2670	1873	1873	C	Y	

<u>REMARKS :</u>	<u>FOOTNOTES :</u>	<u>V50 SUMMARY :</u> No. Points : 4 & 4 V50 : 1840 High Partial : 1841 Low Complete : 1838 Range of Results : 101 Range of Mixed : 3
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H.P. White Laboratory, Inc.

Client : PROTECTIVE PRODUCTS INTERNATIONAL

PROTECTION BALLISTIC LIMIT TEST, V50 BL(P)

Job No. : 11050-61

Test Date : 9/10/09

TEST PANEL

Manufacturer: PROTECTIVE PRODUCTS INTERNATIONAL Sample No. : HPW-5 (9mm SXT-IIIa)
 Size: C-5 Heat No. : NA Date Rec'd. : 09-09-09
 Thicknesses: NA Weight : 4.54 lbs. Via : Federal Express
 Avg. Thick. : NA Hardness : NA Returned : Federal Express
 Required BL(P) : Plies/Laminates : UNKNOWN
 Description: PROPRIETARY

MODEL# DX-IIIa, SERIAL# 0163932, LOT# 0909 (BACK)

SET-UP

Shot Spacing: PER-NIJ-STD 0101.06 LEVEL IIIA Primary Vel. Screens : 6.5 ft., 11.5 ft. Range No. : 2
 Witness Panel: CLAY Primary Vel. Location : 9.0 ft. From Muzzle Temp. : 65 F
 Obliquity: 0 deg. Residual Vel. Screens : NA BP : 30.24 in. Hg
 Backing Material: 5.5" CLAY Residual Vel. Location : NA RH : 59%
 Conditioning: AMBIENT Range to Target : 17.3 ft. Barrel No./Gun : 357-9/R-2
 Target to Wit. : 0.0 in. Gunner : L.CHES
 Recorder : B.SHAFER

AMMUNITION

Projectile: 9mm WIN. SXT +P+, 127 gr. Lot No. : 27WK02
 Powder: ACC# 2

APPLICABLE STANDARDS OR PROCEDURES

- (1): PER-NIJ-STD 0101.06 (MODIFIED)
- (2): PRE-TEST CLAY DROPS: 21mm, 21mm, 19mm, 20mm, 21mm
- (3): PRE-TEST CLAY TEMP: 100.0 F

Shot No.	Powder/Seating	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V50	Footnotes
1		3815	1311	3819	1309	1310	P		
2		3455	1447	3468	1442	1444	P		
3		3145	1590	3153	1586	1588	P		
4		3077	1625	3086	1620	1623	P		
5		2924	1710	2937	1702	1706	P		
6		2681	1865	2690	1859	1862	P	Y	
7		2631	1900	2640	1894	1897	C	Y	
8		2685	1862	2699	1853	1857	C	Y	
9		2829	1767	2829	1767	1767	P		
10		2766	1808	2771	1804	1806	C	Y	
11		2807	1781	2816	1776	1778	P	Y	
12		2721	1838	2730	1832	1835	P	Y	

REMARKS :

FOOTNOTES :

V50 SUMMARY :

No. Points : 3 & 3
 V50 : 1839
 High Partial : 1862
 Low Complete : 1806
 Range of Results : 119
 Range of Mixed : 56

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST
DOPPLER RADAR

Date Received: 8/24/09
 Via: FedEx
 Returned Via: UPS

Record No: PPI09069
 Test Date: 8/26/09
 Customer: Protective Products International

Sample

Manufacturer: PPI
 Size: 15 x15 in.
 No. of Plies: 47
 Weight: 2.56 lbs.
 Model No.: DX-III A
 Sample No.: 13
 Lot No.: 0809
 Conditioning: Wet

Threat

Projectile: RCC
 Weight: 2 gr.
 Powder: Bullseye
 Barrel Length: 26 in
 Obliquity: 0 deg.
 Test Spec: CO/PD 00-02H

Range 3

Muzzle to Target: 10.00 ft.
 Target to Witness: 0.50 ft.
 Witness Panel: 2024-T3 Alum.
 Temperature: 72 °F
 Humidity: 48 %

Shot Info.		Velocity Information		Penetration Results	
SHOT No.	Powder Charge	Muzzle f.p.s.	Striking f.p.s.	Include Shot	Complete Partial
1	5.5	3143	2756	n	p
2	5.7	3221	2810	n	p
3	5.9	3299	2877	n	p
4	6.1	3451	3009	n	p
5	6.4	3537	3076	n	p
6	6.7	3455	3033	n	p
7	6.9	3627	3171	y	p
8	7.2	3746	3258	y	c
9	7.0	3638	3180	y	c
10	6.9	3687	3197	y	p
11	7.0	3722	3256	y	c
12	6.9	3585	3133	y	p

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50 VELOCITY	HIGH PARTIAL	LOW COMPLETE	RANGE OF RESULTS	RANGE OF MIXED RESULTS
	3199	3197	3180	125	17

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.
 V50 based on three partial and three complete penetrations.

Sample Description:

Layers 1-7: Smooth flex polyethylene film.
 Layers 8-15: Flex woven aramid fiber (24x24).
 Layers 16-47: Smooth flex polyethylene film.

Lutz/Nold

UNITED STATES TEST LABORATORY
V50 BALLISTIC LIMIT TEST

Date Received: 08/24/09
Via: FedEx
Returned Via: UPS

Record No.: PPI09076
Test Date: 08/27/09
Customer: Protective Products Int'l

Sample

Manufacturer: PPI
Size: 15 x 15 in.
No. of Plies: 47
Weight: 2.58 lbs.
Model No.: DX-III A
Sample No.: 20
Lot No.: 0809
Conditioning: Wet

Threat

Projectile: RCC
Weight: 64 gr.
Powder: Bullseye
Barrel Length: 26 in.
Obliquity: 0 deg.
Test Spec.: CO/PD 00-02H

Range 1

Muzzle to Scr. 1: 4.75 ft.
Screen 1 - 2: 5.73 ft.
Screen 2 - Target: 4.25 ft.
Target to Witness: 0.50 ft.
Midpoint to Target: 7.12 ft.
Witness Panel: 2024-T3 Alum.
Temperature: 72 °F.
Humidity: 55 %

SHOT No.	Powder	Chronograph 1		Chronograph 2		AVERAGE Velocity (fps)	Loss	Instrument	Penetration	
		TIME sx-5	VELOCITY fps	TIME sx-5	VELOCITY fps				SHOT Incl.	Complete Partial
1	14.0	306.7	1868	218.3	1871	1869	72	1798	n	p
2	14.6	297.3	1927	212.0	1927	1927	74	1853	n	p
3	15.2	290.9	1969	207.4	1970	1969	75	1894	y	c
4	14.6	299.8	1911	213.1	1917	1914	73	1841	n	p
5	15.2	288.9	1983	206.1	1982	1982	76	1906	y	p
6	15.8	282.9	2025	201.2	2030	2028	78	1950	y	c
7	15.2	293.1	1954	209.1	1954	1954	75	1879	y	p
8	15.8	279.9	2046	199.6	2047	2047	78	1968	y	p
9	16.4	275.9	2076	196.1	2083	2080	80	2000	y	c
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-

This test was performed in accordance with the specification requirements and the results properly reflect the ballistic performance of the listed sample.	V50	HIGH	LOW	RANGE OF	RANGE OF
	VELOCITY	PARTIAL	COMPLETE	RESULTS	MIXED RESULTS
	1933	1968	1894	121	74

REMARKS/NOTES

Sample secured using air/hydraulic frame and clamps.
V50 based on three partial and three complete penetrations.

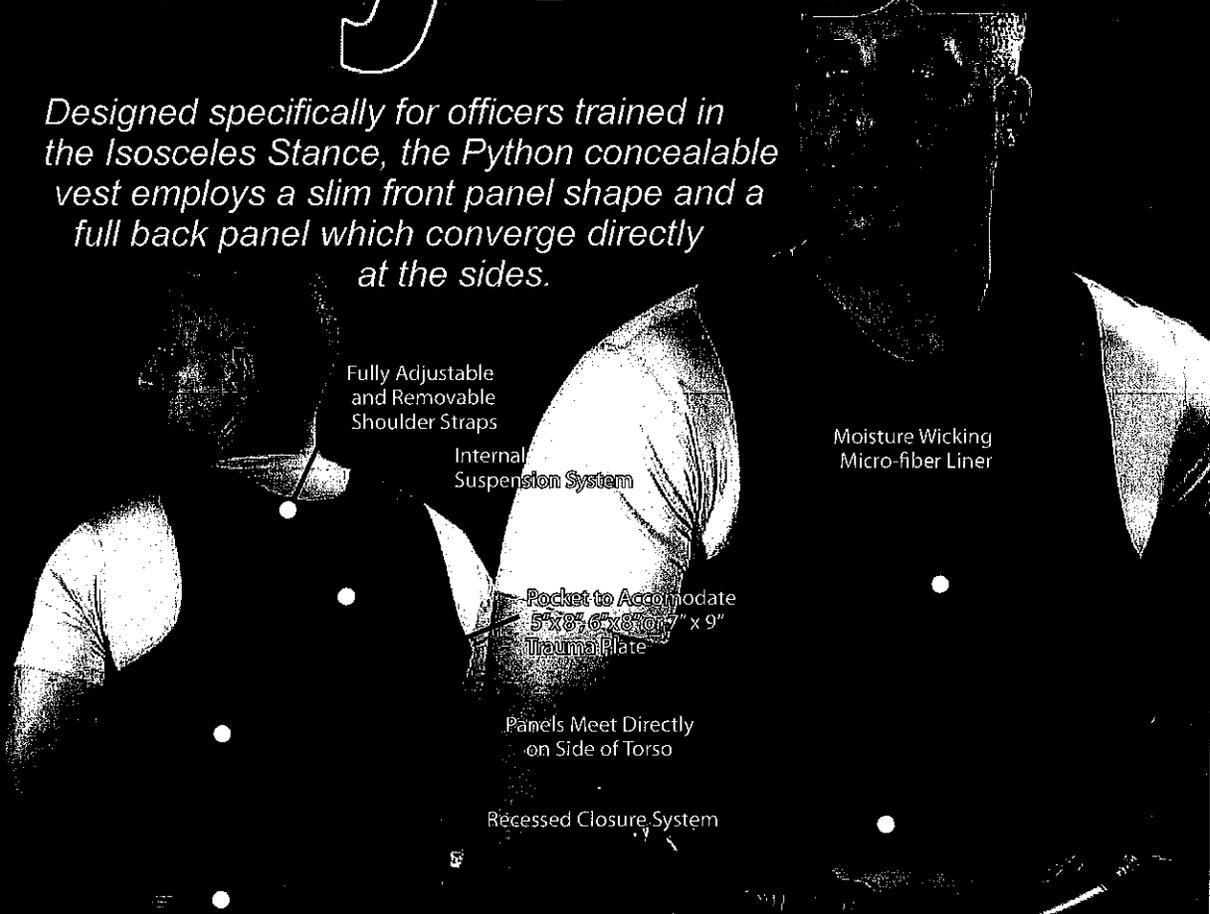
Sample Description:

Layers 1-7: Smooth flex polyethylene film.
Layers 8-15: Flex woven aramid fiber (24x24).
Layers 16-47: Smooth flex polyethylene film.

Crawford/Wilson

Python

Designed specifically for officers trained in the Isosceles Stance, the Python concealable vest employs a slim front panel shape and a full back panel which converge directly at the sides.



Fully Adjustable and Removable Shoulder Straps

Internal Suspension System

Moisture Wicking Micro-fiber Liner

Pocket to Accommodate 5"x8", 6"x8" or 7"x9" Trauma Plate

Panels Meet Directly on Side of Torso

Recessed Closure System

The Python, shown here in the ultra lightweight, textured nylon, Honeycomb Carrier System.

AVAILABLE IN THE FOLLOWING HIGH-PERFORMANCE PPE CARRIER SYSTEMS:

SUPPLEX

HONEYCOMB SUPPLEX

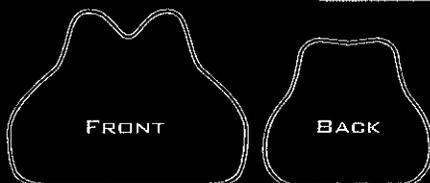
SUPERFABRIC

External Plate Pocket to Accommodate 5"x8", 6"x8", or 7"x9" Trauma Pack.

Internal Plate Pocket to Accommodate 5"x8", 6"x8", or 7"x9" Trauma Pack.

Internal Plate Pocket to Accommodate 5"x8", 6"x8", or 7"x9" Trauma Pack.

COLORS: BLACK, NAVY, TAN, WHITE

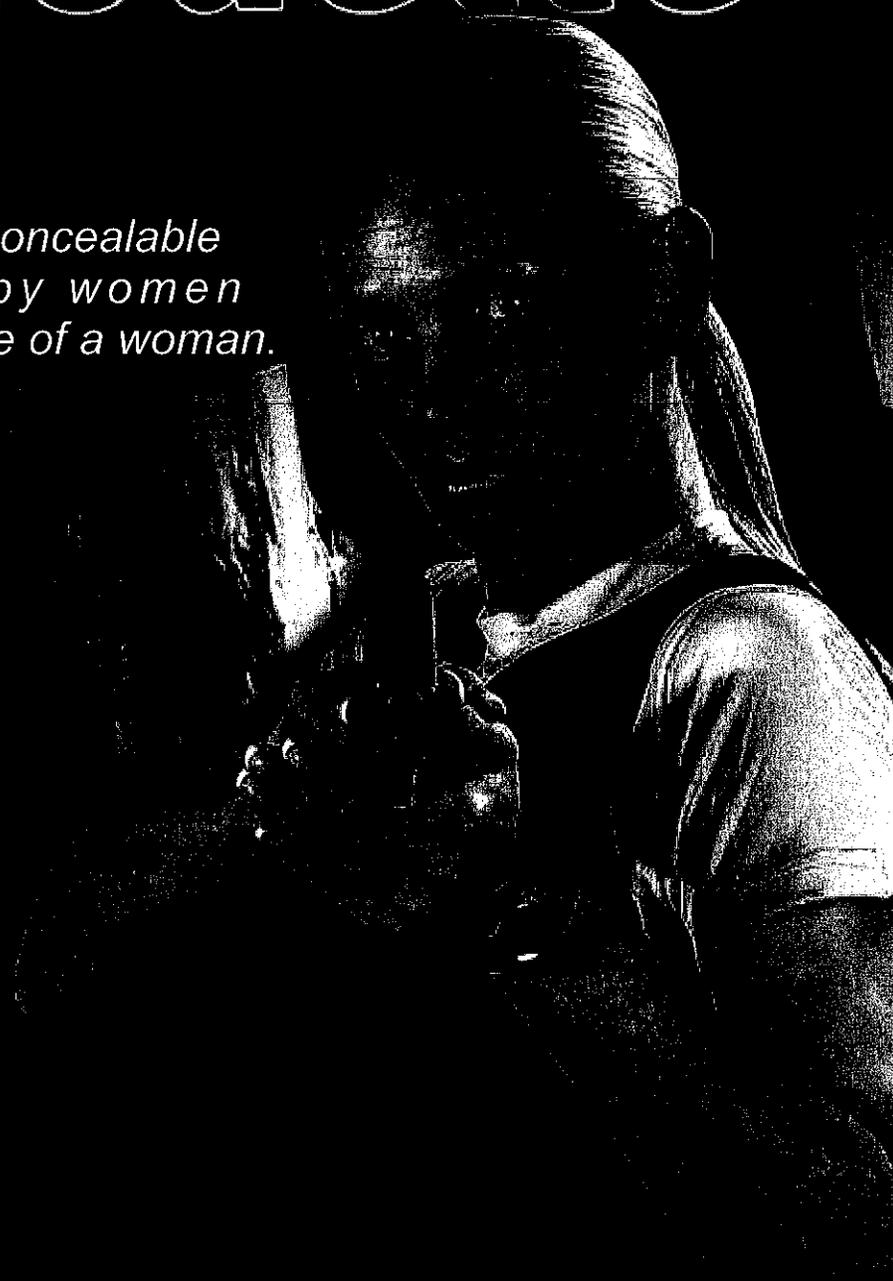


PROTECTIVE PRODUCTS ENTERPRISES

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Trilhouette

*PPI's New Trilhouette Concealable
Armor - designed by women
specifically for the shape of a woman.*



PROTECTIVE PRODUCTS INTERNATIONAL

CONCEALABLE ARMOR

ADVANCED BALLISTIC PROTECTION FOR LAW ENFORCEMENT PROFESSIONALS



The **Trilhouette** Female TG Series, shown here in the ultra-lightweight textured nylon, Honeycomb Carrier System, provides the mobility and exceptional comfort you've always wanted in a concealable vest. Features include ballistic packages with form-fitted cups that provide comprehensive ballistic protection and reduced backface signature.

The Female TG Series incorporates our unique three-piece panel technology to provide a form-fitting front panel, resulting in a safe, reliable, comfortable fitting concealable vest.

Fully Adjustable and Removable Shoulder Straps

Moisture Wicking Micro-fiber Liner

Pocket to Accomodate 5"x8", 6"x8" or 7"x9" Trauma Plate

Darted Female Carrier

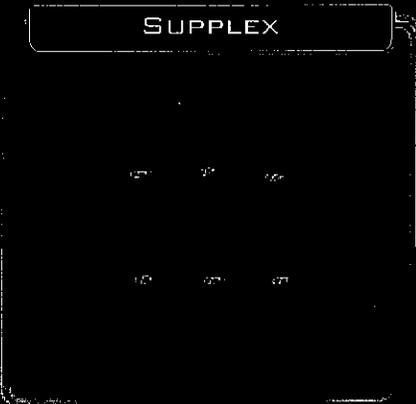
Recessed Closure System

Panels Meet Directly on Side of Torso



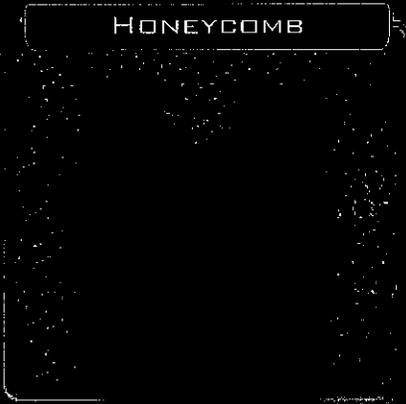
AVAILABLE IN THE FOLLOWING HIGH-PERFORMANCE PPI CARRIER SYSTEMS

SUPPLEX



External Pocket to Accomodate 5"x8", 6"x8", or 7"x9" Trauma Plate.

HONEYCOMB



Internal Pocket to Accomodate 5"x8", 6"x8", or 7"x9" Trauma Plate.

SUPERFABRIC^{®*}



Internal Pocket to Accomodate 5"x8", 6"x8", or 7"x9" Trauma Plate.

SUPPLEX AND HONEYCOMB COLORS: BLACK, NAVY, TAN, WHITE

SUPERFABRIC[®] COLOR: GRAY ONLY

* Additional Charge Applies to SuperFabric[®]

Female TG Series	Level II	Level II
NIJ Model No.	TGF-II	TGF-IIIa
Aerial Density	0.89 psf	1.35 psf
Panel Thickness	0.19"	0.33"



Protective Products International is an ISO 9001:2000 registered company.

954.846.8222 www.body-armor.com 800.509.9111



PROTECTIVE PRODUCTS INTERNATIONAL

MOLLE LBV

Ideal for all law enforcement professionals, PPI's Load Bearing Vests provide quick access to necessary equipment during undercover and special assignments.



POLICE



POLICE



The **MOLLE LBV** features a Cordura® nylon outershell with MOLLE compatible webbing on the front and back. The LBV has hook and loop adjustable side closures, a 4" wide internal cummerbund for a more secure fit.

PROTECTIVE PRODUCTS INTERNATIONAL

CONCEALABLE ARMOR

ADVANCED BALLISTIC PROTECTION FOR LAW ENFORCEMENT PROFESSIONALS





Modular Equipment Pouches

All Protective Products International (PPI) pouches utilize the Soft Snap attachment system, which is universally compatible with the MOLLE webbing standard on all PPI tactical armor. Soft Snap does not use metal snaps which can oxidize and trap sand, making them difficult or impossible to open. When secured correctly, you will quickly see why Soft Snap is the best MOLLE attachment system in the world.

MAGAZINE POUCHES

MP-MS1
M16 Mag (Holds 1)



MP-MM161
M16 Mag 2x1 (Holds 2)



MP-MM162
M16 Mag 2x2 (Holds 4)



MP-MP52
MP5 Mag 2x2 (Holds 4)



MP-MPM2
MP9 Pistol Mag (Holds 2)



SHOTGUN & LESS LETHAL POUCHES

MP-M12G1
Shot Gun Shells
(Holds 12)



MP-MSG1
Smoke Grenade
(Holds 1)



MP-MASP21
ASP/Flashlight/OC
(Holds 1)



MP-M40MM2
40mm Grenade
(Holds 2)

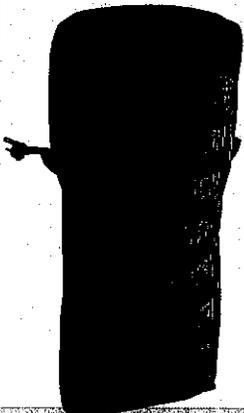


MP-MFB2
Flash Bang
(Holds 2)

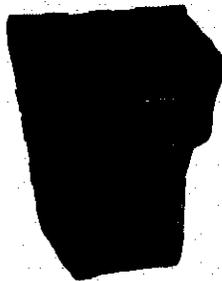


ACCESSORY POUCHES

MP-MH201
Hydration
(Holds 1-100 oz. Bladder)



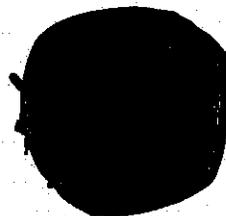
MP-MGM1
Gas Mask
(Holds 1)



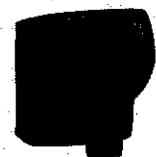
MP-MRP1
MBITR Radio
(PRC-148 MBITR)



MP-MULT3
Utility
(7"W x 6"H x 3"D)



MP-MCUFF1
Hand Cuff
(Holds 1 Pair)



PROTECTIVE PRODUCTS INTERNATIONAL

800.509.9111

sales@body-armor.com

www.body-armor.com

S.P.E.E.D.

The Ultimate in Lightweight Armor Protection Against Exotic Rounds



Specifications

11000 Plate

Model #11000
 Size: 6" x 8"
 Curve: Multi Curve
 Max. Weight: 0.4 lbs.
 Thickness: 0.25"
 Construction: 100% Polyethylene

11001 Plate

Model #11001
 Size: 7" x 9"
 Curve: Multi Curve
 Max. Weight: 0.5 lbs.
 Thickness: 0.25"
 Construction: 100% Polyethylene

10022 Plate

Model #10022
 Size: 10" x 12"
 Curve: Multi Curve
 Max. Weight: 0.8 lbs.
 Thickness: 0.25"
 Construction: 100% Polyethylene

Ballistics

Stopped multiple hits of the following rounds when independently tested against NIJ 0108.01.

Threats defeated per NIJ 0108.01 Stand Alone

357 Sig Spear	125 gr GDHP @ 1410 fps
9mm Fiocchi	115 gr FMJ @ 1150 fps
9mm Winchester Ranger	127 gr SXT+P+ @ 1250 fps
40 cal Aguila IQ	95 gr HP @ 1500 fps
Tokarev 7.62x25 Foreign	85 gr FMJ (Steel Jacket) @ 1540 fps
Tokarev 7.62x25 Sellier & Bellot	85 gr FMJ (Steel Jacket) @ 1600 fps
Tokarev 7.62x25 Norinco	85 gr FMJ (Steel Jacket) @ 1520 fps
FN 5.7x28	.40/JSP SS195 @ 2072 fps
FN 5.7x28	40/V-Max SS197SR @ 1729 fps

Threats defeated per NIJ 0108.01 ICW Level II Vest

357 Sig Corbon	115 gr JHP @ 1540 fps
30 cal carbine	110 gr FMJ @ 2030 fps
12 gauge Winchester rifled slug	1 oz Hollow Point @ 1600 fps

Threats defeated per NIJ 0115.00

Spike Protection Level 1	E1 @ 24.2 J
Spike Protection Level 1	E2 @ 36.2 J



PROTECTIVE PRODUCTS
 1649 NW 136th Ave
 Sunrise, FL 33323
 954.846.8222
 800.509.9111
 954.846.0555 Fx
 sales@body-armor.com
 www.body-armor.com



PROTECTIVE PRODUCTS
 ENTERPRISES

HARD ARMOR PLATES

#2518

Type	Level III/IV In Conjunction w/ IIA Armor
Part Number	2518
Size	10"x12"
Construction	Ceramic/Composite
Weight	6.55 lbs. (2.97 kg)
Thickness	0.70" (16.5mm)
Curvature	Triple Curve
NIJ Certification	No
Ballistic Testing	6 Rounds M80 Ball or 1 Round APM2

PROTECTIVE PRODUCTS INTERNATIONAL

URBAN ASSAULT SYSTEMS

ADVANCED PROTECTIVE GEAR



FOR URBAN SPECIAL OPERATIONS

nqa
ANAB
Registered

Protective Products International, an
ISO 9001:2004 registered company.

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HARD ARMOR PLATES

#2092

Type	Level IV Stand Alone
NIJ Model Number	TC4C
Part Number	2092
Size	10"x12"
Construction	Ceramic / Composite
Weight	8.15 lbs (3.7 kg)
Thickness	0.75" (19mm)
Curvature	Triple Curve
NIJ 0101.04 Certification	Yes

PROTECTIVE PRODUCTS INTERNATIONAL

URBAN ASSAULT SYSTEMS

ADVANCED PROTECTIVE GEAR



FOR URBAN SPECIAL OPERATIONS

nqa



Registered

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HARD ARMOR PLATES

#304

Type	Level III Stand Alone
Part Number	304
Size	10" x 12"
Construction	100% Polyethylene
Weight	3.2 lbs.
Thickness	1.0" (25.4mm)
Curvature	Flat
NIJ Certification	III
Ballistic Testing	BFS Avg. - 7.62 M80 BALL

PROTECTIVE PRODUCTS INTERNATIONAL

URBAN ASSAULT SYSTEMS

ADVANCED PROTECTIVE GEAR



FOR URBAN SPECIAL OPERATIONS

NIJ

ANAB
ACCREDITED

Registered

Protective Products International Inc. is
ISO 9001:2000 registered company.

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PROTECTIVE PRODUCTS

Care Instructions

Cleaning Instructions

Cleaning a removable cover

Important: Remove ballistic panels and trauma plates/pacs from cover and clean them separately. Follow the cleaning instructions on the panel labels.

- Close all the Velcro fasteners.
- Machine wash gentle in warm water.
- Tumble dry on low.
- Return panels to their proper places.

Nylon / Permanent style vest

Rinsing your vest with water and washing with mild soaps will not damage your vest. Never submerge your vest underwater – rinse your vest off after any extended use. In addition to preventing the buildup of odor and other body residues, frequent rinsing will make wearing your vest more pleasant. You can rinse your vest in a conventional sink or shower; use a small amount of mild soap and hand scrub the body side of the vest and elastic straps about every fifth rinse. Always rinse soap off thoroughly and towel dry vest immediately after rinsing. Refer to care instructions on vest.

Repairs and Changes

FIT, FINISH AND COMFORT

Protective Products will warranty vests for fit, finish and comfort for a minimum of **60 days after delivery** by the officer or agent. During the 60 day period, if the officer or agent is unhappy with the fit, finish or comfort the vest may be returned for alterations at no charge to the City of Fort Lauderdale Police Department.

REPLACEMENT WARRANTY

Protective Products will replace your vest free of charge if your vest should become damaged during an actual **ON-DUTY CONFRONTATION** with a firearm projectile or a sharp and / or blunt instrument and / or during an **ON-DUTY** automobile accident. The damaged vest and a copy of the department certification of the incident involving the damaging of the vest is required, and should be sent to Protective Products at 1649 NW 136 Avenue, Sunrise, FL 33323 as soon as they become available. Protective Products will issue a new vest as soon as all records of the occurrence are confirmed.

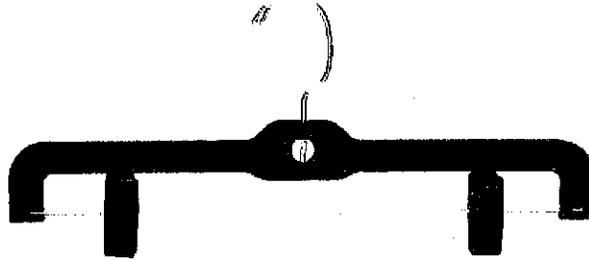
Technical support is no more than a phone call away. Cory Provenzano, Director of Business Development, Andrew McClester, Vice President Domestic Sales, Mike Slate, Director of Engineering and Development, and Beverly Slavick, Customer Relations Manager, are designated Protective Products representatives for the City of Fort Lauderdale contract.



Care Instructions

Storage

When your vest cannot be stored on a flat surface, we recommend hanging the vest using a plastic clip-style hanger. The vest should be hung inside out to allow for ventilation. The clips should be attached to the ballistic panels. This will prevent the elastic from stretching out. A sample of the hanger recommended is below:



Disposal Plan / Retirement Considerations

In order to properly dispose of used vests, the City of Fort Lauderdale may choose to ship them to our facility. The vests will be inventoried and a complete list will be sent to your agency. The vests will be destroyed / recycled according to industry protocol and a Certification of Destruction will be provided to the City of Fort Lauderdale after the body armor is destroyed. All costs associated with this service, including freight, will be absorbed by Protective Products.



References for Protective Products ballistic packages

Florida Highway Patrol
Captain Bryan Hudson
75 College Drive, Suite 221
Havana, FL 32333
Phone: (850) 558-4255
Hudson.BS@fhp.hsmv.state.fl.us

Miami Dade County Police Department
Laura Romano
9105 NW 25 Street, Suite 3049
Miami, FL 33172
Phone: (305) 471-2596
LRomano@mdpd.com

Sunrise Police Department
Officer Mark Krumenacker
777 Sawgrass Corporate Parkway
Sunrise, FL 33323
Phone: (954) 746-3512
mkrumenacker@cityofsunrise.org

New York City Police Department
Narcotics Unit
Detective Tony Demarco
1 Rodmen's Neck
Bronx, NY 10464
Phone: (718) 885-0070

1655 NW 136 Avenue * Sunrise, FL 33323
Phone: (954) 846-8222 * (800) 509-9111 * Fax: (954) 846-0555
Website: www.body-armor.com



U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

Washington, D.C. 20530

June 9, 2009.

Alex F. Cejas,
Chief Operating Officer
Protective Products International Corp.
1649 NW 136th NW Avenue
Sunrise, FL 33323

Notice of Compliance with NIJ Standard-0101.06

Body Armor Model Designation: DX-II
NIJ Compliance Status Expires: June 9, 2014

Dear Mr. Cejas:

We have completed our evaluation of the body armor model identified above that was submitted to the National Institute of Justice's (NIJ's) Voluntary Body Armor Compliance Testing Program. We are pleased to inform you that the above body armor model satisfies the requirements of NIJ Standard-0101.06 and the Compliance Testing Program.

We also received your completed declaration concerning the model noted above and your agreement to participate in the conformity assessment follow-up process.

The body armor model details are listed on the NIJ Compliant Products List available at www.justnet.org/CTP.

You are now authorized to place the NIJ Statement of Compliance on the labels of this body armor model and all subsequent production units. The Statement of Compliance shall read:

"This model of armor has been determined to comply with NIJ Standard-0101.06 by the NIJ Compliance Testing Program and is listed on the NIJ Compliant Products List."

All compliance requirements, as identified by the *NIJ Body Armor Compliance Testing Program Administrative Manual* and the *Ballistic Body Armor Applicant Package*, must be maintained as long as the NIJ Statement of Compliance is displayed on this armor model's labels. If, at any time, the compliance status of this armor model is changed, the NIJ Statement of Compliance shall cease to be used as of the date of the status change.

Sincerely,

John Morgan
Deputy Director for Science and Technology
National Institute of Justice

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Penetration and BFS Summary Data

Report Number: 11050-30A Test ID: PPI09-000439 Report Date: 05/11/09
 Manufacturer: ROTECTIVE PRODUCTS INTEF Model Designation: DX-II NIJ Armor Type: 2

Threat 1 - New Armor
 Ammunition: 9mm 124/FMJ Test Velocity: 1305 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 1 Size: C-1				Sample 2 Size: C-1																				
	Front Panel		Back Panel		Front Panel		Back Panel																		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note									
1	1287.7	0	30.0		1303.6	0	33.0		1336.0	0	32.0		1316.1	0	32.0										
2	1329.1	0	33.0		1317.4	0	37.0		1309.6	0	36.0		1283.5	0	34.0										
3	1293.5	0	29.0		1280.4	0	35.0		1302.1	0	32.0		1306.9	0	33.0										
4	1274.5	0			1297.7	0			1319.4	0			1301.4	0											
5	1285.8	0			1286.2	0			1308.6	0			1286.0	0											
6	1293.8	0			1303.4	0			1283.0	0			1281.6	0											
7																									
8																									
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 33.0 mm				Maximum BFS: 37.0 mm				k1: 1.568				St. Dev.: 2.30 mm			
(Pass - No BFS greater than 44 mm)																									

Shot Number	Sample 3 Size: C-5				Sample 4 Size: C-5																				
	Front Panel		Back Panel		Front Panel		Back Panel																		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note									
1	1372.7	0	29.0		1329.1	0	28.0		1339.4	0	28.0		1328.9	0	27.0										
2	1333.9	0	31.0		1368.6	0	30.0		1331.2	0	32.0		1306.0	0	35.0										
3	1312.5	0	31.0		1363.3	0	31.0		1308.6	0	31.0		1306.7	0	29.0										
4	1337.6	0			1356.9	0			1359.8	0			1311.3	0											
5	1368.9	0			1325.7	0			1319.4	0			1348.3	0											
6	1367.4	0			1326.8	0			1325.2	0			1296.0	0											
7																									
8																									
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 30.2 mm				Maximum BFS: 35.0 mm				k1: 1.568				St. Dev.: 2.17 mm			
(Pass - No BFS greater than 44 mm)																									

Threat 2 - New Armor
 Ammunition: 357 Mag 158/JSP Test Velocity: 1430 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 5 Size: C1				Sample 6 Size: C1																				
	Front Panel		Back Panel		Front Panel		Back Panel																		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note									
1	1434.9	0	36.0		1425.7	0	34.0		1447.2	0	35.0		1415.8	0	30.0										
2	1431.8	0	36.0		1440.7	0	38.0		1420.1	0	33.0		1420.9	0	36.0										
3	1407.3	0	37.0		1416.8	0	37.0		1468.6	0	33.0		1430.6	0	34.0										
4	1444.0	0			1435.5	0			1418.2	0			1448.2	0											
5	1440.9	0			1436.0	0			1448.9	0			1453.3	0											
6																									
7																									
8																									
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 34.9 mm				Maximum BFS: 38.0 mm				k1: 1.568				St. Dev.: 2.23 mm			
(Pass - No BFS greater than 44 mm)																									

Shot Number	Sample 7 Size: C-5				Sample 8 Size: C-5																				
	Front Panel		Back Panel		Front Panel		Back Panel																		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note									
1	1468.4	0	33.0		1409.6	0	30.0		1465.0	0	34.0	b	1435.3	0	31.0										
2	1467.1	0	31.0		1454.8	0	32.0		1457.9	0	33.0		1442.4	0	37.0										
3	1456.9	0	31.0		1452.6	0	34.0		1457.9	0	35.0		1408.1	0	34.0										
4	1449.7	0			1463.9	0			1458.6	0			1443.2	0											
5	1429.4	0			1421.3	0			1448.6	0			1399.6	0											
6	1405.7	0			1445.3	0						b	1400.6	0											
7									1457.09	0															
8									1453.28	0															
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 32.9 mm				Maximum BFS: 37.0 mm				k1: 1.568				St. Dev.: 2.02 mm			
(Pass - No BFS greater than 44 mm)																									

**NATIONAL INSTITUTE OF JUSTICE
COMPLIANCE TEST REPORT**

Penetration and BFS Summary Data

Report Number: 11050-30A Test ID: PPI09-000439 Report Date: 05/11/09
 Manufacturer: ROTECTIVE PRODUCTS INTEF Model Designation: DX-II NIJ Armor Type: 2

Threat 1 - Conditioned Armor
 Ammunition: 9mm 124/FMJ Test Velocity: 1245 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 21 Size: C-5				Sample 22 Size: C1											
	Front Panel		Back Panel		Front Panel		Back Panel									
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1258.7	0	38.0		1231.4	0	33.0		1245.3	0	33.0		1261.4	0	33.0	
2	1248.1	0	36.0		1275.3	0	28.0		1254.5	0	35.0		1237.3	0	32.0	
3	1257.9	0	35.0		1247.8	0	22.0		1253.1	0	31.0		1258.8	0	39.0	
4	1227.9	0			1271.5	0			1256.1	0			1259.0	0		
5	1233.7	0			1257.4	0			1231.5	0			1259.3	0		
6	1233.8	0			1218.5	0			1252.3	0			1250.3	0		
7																
8																
Summary:		Perforations: 0 (Pass) Maximum BFS: 38.0 mm (no requirement)				Perforations: 0 (Pass) Maximum BFS: 39.0 mm (no requirement)										

Threat 2 - Conditioned Armor
 Ammunition: .357 Mag 158/JSP Test Velocity: 1340 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 23 Size: C5				Sample 24 Size: C1											
	Front Panel		Back Panel		Front Panel		Back Panel									
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1335.1	0	31.0		1332.3	0	32.0		1344.6	0	37.0		1345.5	0	37.0	
2	1343.5	0	36.0		1336.2	0	36.0		1345.0	0	38.0		1334.0	0	32.0	
3	1328.2	0	31.0		1336.0	0	34.0		1345.7	0	38.0		1339.6	0	32.0	
4	1343.7	0			1348.8	0			1341.6	0			1341.4	0		
5	1334.9	0			1338.7	0			1349.9	0			1339.0	0		
6	1338.2	0			1348.8	0										
7																
8																
Summary:		Perforations: 0 (Pass) Maximum BFS: 36.0 mm (no requirement)				Perforations: 0 (Pass) Maximum BFS: 38.0 mm (no requirement)										

Overall P-BFS Summary																
Perforations:		0 This armor model meets the perforation performance requirements of NIJ Standard-0101.06 Section 7.8.8.														
Backface Signature																
Maximum BFS:		38.0 mm This armor model meets the BFS performance requirements of NIJ Standard-0101.06 Section 7.8.8 Item a.														

Compliance Test Report revision 354 (2009-03-09) / R version 2.7.1 (2008-06-23) / MS Excel version 11.0 / Operating System version Windows (32-bit) NT 5.01

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

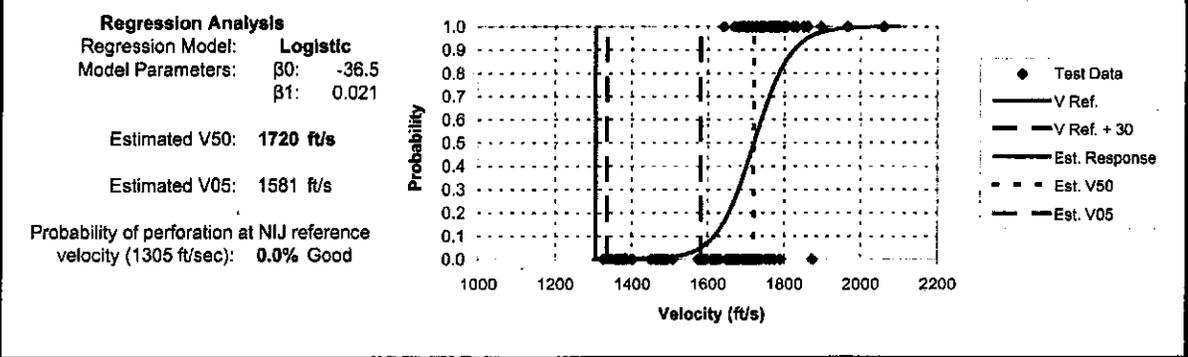
Report Number: 11050-30A Test ID: PPI09-000439 Report Date: 05/11/09
 Manufacturer: PROTECTIVE PRODUCTS INTER Model Designation: DX-II NIJ Armor Type: 2

Threat 1 - New Armor
 Ammunition: 9mm 124/FMJ Test Velocity: 1305 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 11			Sample 11			Sample 12			Sample 12			Sample 13		
	Front	Panel		Back	Panel		Front	Panel		Back	Panel		Front	Panel	
	Avg. Vel.	Perf	Note												
	(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)	
1	1338.2	0		1344.6	0		1378.4	0		1401.1	0		1325.9	0	
2	1385.6	0		1477.8	0		1460.9	0		1490.8	0		1466.7	0	
3	1506.7	0		1593.1	0		1583.8	0		1587.6	0		1575.1	0	
4	1661.7	0		1706.8	1		1672.2	0		1678.4	1		1679.8	0	
5	1744.6	1		1631.9	0		1729.2	1		1650.2	0		1715.6	0	
6	1690.9	1		1692.0	0		1680.7	1		1698.7	1		1785.4	1	
7	1657	0		1735.81	1		1658.1	0		1610.31	0		1761.81	1	
8	1703.29	0		1696.64	0		1714.09	0		1670.84	0		1724.73	1	
9	1784.76	1		1748.56	1		1763.67	1		1705.03	0		1641.23	1	
10	1722.95	1		1700.39	1		1696.36	0		1743.68	1		1618.39	0	
11	1675.04	0		1660.03	0		1734.01	1		1739.74	1		1668.62	1	
12	2059.16	1		1717.92	0		1677.57	1		1683.79	1		1587.58	0	
13															
14															
15															

Shot Number	Sample 13			Sample 14			Sample 14			Sample 15			Sample 15		
	Back	Panel		Front	Panel		Back	Panel		Front	Panel		Back	Panel	
	Avg. Vel.	Perf	Note												
	(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)	
1	1380.3	0		1398.6	0		1358.9	0		1366.5	0		1371.9	0	
2	1450.5	0		1484.6	0		1490.1	0		1463.9	0		1475.1	0	
3	1623.1	0		1589.1	0		1583.0	0		1580.5	0		1614.7	0	
4	1707.1	0		1661.7	0		1668.9	0		1662.5	0		1689.5	0	
5	1778.1	1		1771.5	0		1780.6	1		1788.9	0		1766.5	0	
6	1752.2	0		1861.2	1		1715.0	1		1874.4	0		1861.5	1	
7	1798.24	1		1800.51	1		1680.39	0		1966.18	1		1796.62	1	
8	1758.4	1		1772.42	0		1738.83	0		1896.82	1		1775.89	1	
9	1699.53	1		1820.83	1		1769.6	0		1850.48	1		1725.63	0	
10	1663.62	0		1758.4	1		1830.85	1		1806.36	1		1762.43	0	
11	1713.21	1		1705.61	1		1773.99	1		1767.1	1		1804.73	1	
12	1655.9	0		1653.17	0		1731.31	0		1701.84	0		1742.47	1	
13															
14															
15															

Summary: Total Usable Shots: 120 Good Perforations below 1335 ft/s: 0 Good
 Perforations (Complete Penetrations): 48 Good
 Stops (Partial Penetrations): 72 Good



NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-30A Test ID: PPI09-000439 Report Date: 05/11/09
 Manufacturer: PROTECTIVE PRODUCTS INTER Model Designation: DX-II NIJ Armor Type: 2

Ammunition: .357 Mag 158/JSP Threat 2 - New Armor Test Velocity: 1430 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 16			Sample 16			Sample 17			Sample 17			Sample 18		
	Front	Panel		Back	Panel		Front	Panel		Back	Panel		Front	Panel	
	Avg. Vel.	Perf	Note												
	(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)	
1	1468.4	0		1408.8	0		1472.3	0		1450.5	0		1440.5	0	
2	1489.4	0		1478.9	0		1503.5	0		1515.6	0		1482.1	0	
3	1530.5	0		1527.9	0		1520.9	0		1526.3	0		1520.2	0	
4	1590.8	1		1644.7	1		1613.9	0		1613.9	0		1613.9	0	
5	1526.7	0		1587.3	0		1692.6	1		1676.7	0		1697.2	1	
6	1581.3	1		1652.6	0		1633.7	1		1752.5	1		1635.6	1	
7	1531.4	0		1690.62	1		1558.6	0		1697.51	1		1540.83	0	
8	1578.28	0		1610.57	1		1610.31	1		1621.54	1		1617.08	0	
9	1656.73	1		1545.12	0		1558.6	0		1556.18	0		1674.48	1	
10	1589.32	1		1616.03	0		1613.43	0		1631.85	0		1602.57	0	
11	1633.19	1		1686.91	1		1661.68	1		1692.62	1		1655.08	1	
12	1566.91	1		1575.55	0		1602.31	0		1629.2	0		1604.11	0	
13															
14															
15															

Shot Number	Sample 18			Sample 19			Sample 19			Sample 20			Sample 20		
	Back	Panel		Front	Panel		Back	Panel		Front	Panel		Back	Panel	
	Avg. Vel.	Perf	Note												
	(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)	
1	1486.1	0		1453.5	0		1469.7	0		1446.8	0		1461.6	0	
2	1517.0	0		1479.7	0		1491.2	0		1482.1	0		1487.7	0	
3	1547.7	0		1585.5	0		1590.8	0		1562.3	0		1572.1	0	
4	1656.5	0		1691.5	0		1684.4	1		1695.2	0		1696.1	1	
5	1758.4	0		1758.7	1		1640.2	0		1764.0	1		1628.1	0	
6	1848.8	1		1716.2	1		1696.4	1		1725.0	0		1695.8	1	
7	1803.1	1		1661.68	1		1636.13	0		1790.19	1		1643.66	0	
8	1741.56	1		1582.53	0		1701.26	1		1729.81	1		1697.22	1	
9	1692.91	0		1639.08	1		1642.85	1		1680.39	1		1653.44	0	
10	1739.74	1		1601.03	0		1577.54	1		1625.49	0		1694.92	1	
11	1705.03	1		1625.75	0		1523.93	0		1684.35	0		1648.26	1	
12	1655.9	0		1693.77	0		1583.03	0		1709.4	0		1611.09	0	
13															
14															
15															

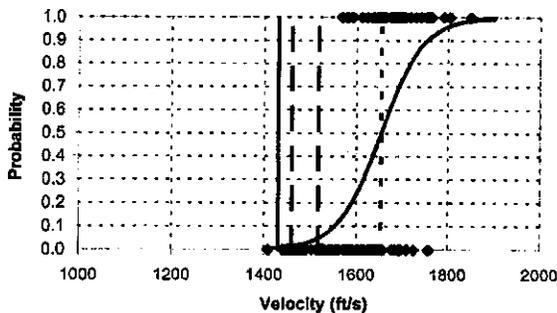
Summary: Total Usable Shots: 120 Good Perforations below 1460 ft/s: 0 Good
 Perforations (Complete Penetrations): 45 Good
 Stops (Partial Penetrations): 75 Good

Test Data and Regression Model

Regression Analysis
 Regression Model: **Logistic**
 Model Parameters: β_0 : -36.0
 β_1 : 0.022

Estimated V50: **1653 ft/s**
 Estimated V05: 1518 ft/s

Probability of perforation at NIJ reference velocity (1305 ft/sec): **0.8% Good**



NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-30A Test ID: PPI09-000439 Report Date: 05/11/09
 Manufacturer: PROTECTIVE PRODUCTS INTER Model Designation: DX-II NIJ Armor Type: 2

Threat 1 - Conditioned Armor

Ammunition: 9mm 124/FMJ
 Test Velocity: 1245 ± 30 ft/s Cond: Dry

Threat 2 - Conditioned Armor

Ammunition: .357 Mag 158/JSP
 Test Velocity: 1340 ± 30 ft/s Cond: Dry

Shot Number	Sample 25			Sample 25		
	Front	Panel		Back	Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note
1	1202.2	0		1229.3	0	
2	1438.2	0		1379.7	0	
3	1535.9	0		1466.5	0	
4	1633.5	0		1625.5	1	
5	1731.0	1		1518.1	0	
6	1665.6	0		1564.7	0	
7	1698.08	1		1633.99	0	
8	1647.45	1		1685.21	1	
9	1589.58	1		1629.46	1	
10	1527.65	0		1587.3	0	
11	1589.83	1		1643.39	0	
12	1544.88	0		1700.39	1	
13						
14						
15						

Summary:

Total Usable Shots: 24 Good
 Perforations (CP): 9
 Stops (PP): 15

Perforations below 1275 ft/s: 0 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β0: -42.2
 β1: 0.026

Estimated V50: 1625 ft/s

Shot Num	Sample 26			Sample 26		
	Front	Panel		Back	Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note
1	1374.0	0		1341.2	0	
2	1455.0	0		1426.9	0	
3	1524.6	1		1525.1	0	
4	1468.2	0		1602.6	1	
5	1485.0	0		1527.7	1	
6	1537.8	0		1481.0	0	
7	1555.94	0		1508.75	1	
8	1588.31	1		1494.99	0	
9	1533.51	0		1537.99	1	
10	1583.78	1		1491.87	0	
11	1548.47	0		1517.91	1	
12	1591.09	1		1492.76	0	
13						
14						
15						

Summary:

Total Usable Shots: 24 Good
 Perforations (CP): 9
 Stops (PP): 15

Perforations below 1370 ft/s: 0 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β0: -62.1
 β1: 0.040

Estimated V50: 1536 ft/s

Overall Ballistic Limit Summary	
Perforations below Vref + 30 ft/sec:	0
This armor model meets the low perforation velocity performance requirements of NIJ Standard-0101.06 Section 7.9.5.	
Probability of perforation at the P-BFS reference velocity	
Threat 1:	0.0%
Threat 2:	0.8%
This armor model meets the estimated V05 performance requirements of NIJ Standard-0101.06 Section 7.9.5.	

Compliance Test Report revision 354 (2009-03-09) / R version 2.7.1 (2008-06-23) / MS Excel version 11.0 / Operating System version Windows (32-bit) NT 5.01



U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

Washington, D.C. 20530

November 4, 2009

R. Patrick Caldwell
Chief Executive Officer
Protective Products International Corp.
1649 NW 136th NW Avenue
Sunrise, FL 33323

Notice of Compliance with NIJ Standard-0101.06
Body Armor Model Designation: DXF-II
NIJ Compliance Status Expires: November 4, 2014

Dear Mr. Caldwell:

We have completed our evaluation of the body armor model identified above that was submitted to the National Institute of Justice's (NIJ's) Voluntary Body Armor Compliance Testing Program. We are pleased to inform you that the above body armor model satisfies the requirements of NIJ Standard-0101.06 and the Compliance Testing Program.

We also received your completed declaration concerning the model noted above and your agreement to participate in the conformity assessment follow-up process.

The body armor model details are listed on the NIJ Compliant Products List available at www.justnet.org/CTP.

You are now authorized to place the NIJ Statement of Compliance on the labels of this body armor model and all subsequent production units. The Statement of Compliance shall read:

"This model of armor has been determined to comply with NIJ Standard-0101.06 by the NIJ Compliance Testing Program and is listed on the NIJ Compliant Products List."

All compliance requirements, as identified by the *NIJ Body Armor Compliance Testing Program Administrative Manual* and the *Ballistic Body Armor Applicant Package*, must be maintained as long as the NIJ Statement of Compliance is displayed on this armor model's labels. If, at any time, the compliance status of this armor model is changed, the NIJ Statement of Compliance shall cease to be used as of the date of the status change.

Sincerely,

Debra Stoe
Physical Scientist
National Institute of Justice

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Penetration and BFS Summary Data

Report Number: 11050-60A Test ID: PPI09-000562 Report Date: 10/06/09
 Manufacturer: ECTIVE PRODUCTS INTERNAT Model Designation: DXF-II NIJ Armor Type: 2

Threat 1 - New Armor

Ammunition: 9mm 124/FMJ Test Velocity: 1305 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 1 Size: C5				Sample 2 Size: C5				Sample 3 Size: C5			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1299.2	0	27.0		1311.5	0	25.0		1331.9	0	28.0	
2	1274.5	0	29.0		1307.5	0	29.0		1331.9	0	30.0	
3	1302.3	0	30.0		1297.7	0	29.0		1306.8	0	30.0	
4	1295.5	0			1314.1	0			1305.3	0		
5	1288.7	0			1324.9	0			1308.4	0		
6	1294.7	0			1323.3	0			1294.7	0		
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 28.7 mm				
Maximum BFS: 30.0 mm				k1: 1.568				St. Dev.: 1.50 mm				
(Pass - No BFS greater than 44 mm)												

Shot Number	Sample 3 Size: C1				Sample 4 Size: C1				Sample 5 Size: C1			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1290.2	0	28.0		1296.2	0	31.0		1279.1	0	28.0	
2	1297.9	0	29.0		1792.8	0	31.0		1320.7	0	29.0	
3	1311.5	0	31.0		1303.8	0	32.0		1311.5	0	30.0	
4	1278.3	0			1306.0	0			1274.5	0		
5	1283.4	0			1299.2	0			1302.8	0		
6	1292.3	0			1294.0	0			1289.3	0		
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 30.2 mm				
Maximum BFS: 33.0 mm				k1: 1.568				St. Dev.: 1.53 mm				
(Pass - No BFS greater than 44 mm)												

Threat 2 - New Armor

Ammunition: .357 Mag 158/JSP Test Velocity: 1430 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 5 Size: C5				Sample 6 Size: C5				Sample 7 Size: C5			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1466.5	0	31.0		1429.6	0	31.0		1418.6	0	30.0	
2	1456.7	0	32.0		1437.0	0	32.0		1440.7	0	32.0	
3	1442.6	0	33.0		1402.5	0	32.0		1433.3	0	34.0	
4	1429.6	0			1440.7	0			1423.3	0		
5	1427.8	0			1403.3	0			1435.1	0		
6	1431.4	0			1440.7	0			1443.4	0		
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 31.8 mm				
Maximum BFS: 34.0 mm				k1: 1.568				St. Dev.: 1.03 mm				
(Pass - No BFS greater than 44 mm)												

Shot Number	Sample 7 Size: C1				Sample 8 Size: C1				Sample 9 Size: C1			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1434.3	0	33.0		1450.1	0	37.0		1413.2	0	35.0	
2	1431.4	0	36.0		1441.5	0	32.0		1442.6	0	34.0	
3	1440.7	0	42.0		1441.1	0	34.0		1443.4	0	38.0	
4	1427.8	0			1432.5	0			1434.1	0		
5	1442.6	0			1438.8	0			1428.8	0		
6												
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 35.1 mm				
Maximum BFS: 42.0 mm				k1: 1.568				St. Dev.: 2.87 mm				
(Pass - No BFS greater than 44 mm)												

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Penetration and BFS Summary Data

Report Number: 11050-60A Test ID: PPI09-000562 Report Date: 10/06/09
 Manufacturer: ECTIVE PRODUCTS INTERNAT Model Designation: DXF-II NIJ Armor Type: 2

Threat 1 - Conditioned Armor
 Ammunition: 9mm 124/FMJ Test Velocity: 1245 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 21 Size: C1				Sample 22 Size: C5										
	Front Panel		Back Panel		Front Panel		Back Panel								
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note							
1	1268.1	0	31.0		1264.5	0	27.0		1259.8	0	27.0		1253.4	0	27.0
2	1269.5	0	30.0		1258.0	0	27.0		1265.2	0	33.0		1246.0	0	28.0
3	1241.9	0	29.0		1267.4	0	31.0		1246.0	0	28.0		1243.9	0	30.0
4	1237.0	0			1256.0	0			1254.4	0			1258.0	0	
5	1286.3	0			1250.9	0			1273.2	0			1243.2	0	
6					1253.8	0			1242.5	0			1243.9	0	
7															
8															
Summary:		Perforations: 0 (Pass)				Perforations: 0 (Pass)				Perforations: 0 (Pass)					
		Maximum BFS: 31.0 mm (no requirement)				Maximum BFS: 33.0 mm (no requirement)				Maximum BFS: 33.0 mm (no requirement)					

Threat 2 - Conditioned Armor
 Ammunition: .357 Mag 158/JSP Test Velocity: 1340 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 23 Size: C1				Sample 24 Size: C5										
	Front Panel		Back Panel		Front Panel		Back Panel								
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note							
1	1337.4	0	33.0		1339.9	0	30.0		1339.9	0	31.0		1340.8	0	30.0
2	1316.8	0	32.0		1339.1	0	30.0		1339.9	0	32.0		1336.0	0	31.0
3	1320.0	0	35.0		1353.9	0	33.0		1324.0	0	34.0		1341.2	0	32.0
4	1352.3	0			1321.7	0			1348.1	0			1339.9	0	
5	1335.8	0			1328.0	0			1331.9	0			1344.8	0	
6									1350.4	0			1328.0	0	
7															
8															
Summary:		Perforations: 0 (Pass)				Perforations: 0 (Pass)				Perforations: 0 (Pass)					
		Maximum BFS: 35.0 mm (no requirement)				Maximum BFS: 34.0 mm (no requirement)				Maximum BFS: 34.0 mm (no requirement)					

Overall P-BFS Summary	
Perforations:	0 This armor model meets the perforation performance requirements of NIJ Standard-0101.06 Section 7.8.8.
Backface Signature	
Maximum BFS:	42.0 mm
	This armor model meets the BFS performance requirements of NIJ Standard-0101.06 Section 7.8.8 Item a.

Compliance Test Report revision 354 (2009-03-09) / R version 2.9.0 (2009-04-17) / MS Excel version 12.0 / Operating System version Windows (32-bit) NT 5.01

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-60A Test ID: PPI09-000562 Report Date: 10/06/09
 Manufacturer: PROTECTIVE PRODUCTS INTERNATIONAL Model Designation: DXF-II NIJ Armor Type: 2

Threat 1 - New Armor

Ammunition: 9mm 124/FMJ Test Velocity: 1305 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 11				Sample 11				Sample 12				Sample 12				Sample 13			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel		Front Panel			
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note		
1	1304.8	0		1349.2	0		1326.1	0		1329.8	0		1290.7	0						
2	1481.7	0		1485.2	0		1495.4	0		1483.0	0		1442.2	0						
3	1612.1	0		1632.1	1		1628.1	1		1663.9	1		1576.0	0						
4	1757.2	1		1508.8	0		1488.8	0		1492.5	0		1647.2	1						
5	1600.5	0		1552.8	0		1590.3	0		1611.9	1		1568.1	0						
6	1728.0	1		1653.7	0		1660.6	1		1453.3	0		1604.6	0						
7	1614.21	0		1700.97	0		1510.8	0		1571.83	0		1699.24	0						
8	1700.39	1		1784.76	1		1612.9	0		1623.9	1		1747.64	1						
9	1618.38	1		1723.84	1		1671.96	1		1519.3	0		1647.72	0						
10	1482.58	0		1596.17	0		1550.87	0		1592.1	0		1681.52	1						
11	1589.57	0		1659.2	1		1625.75	0		1636.13	0		1602.05	0						
12	1630.26	0		1540.12	0		1735.51	1		1725.92	1		1683.5	1						
13																				
14																				
15																				

Shot Number	Sample 13				Sample 14				Sample 14				Sample 15				Sample 15				
	Back Panel		Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note
1	1281.9	0		1278.0	0		1290.3	0		1339.9	0		1317.7	0							
2	1429.0	0		1435.3	0		1458.6	0		1532.1	0		1480.2	0							
3	1605.4	0		1556.4	0		1567.4	0		1643.1	0		1614.5	1							
4	1706.5	1		1617.1	0		1654.5	0		1764.3	1		1524.6	0							
5	1572.1	0		1752.5	1		1747.9	1		1710.0	1		1585.8	0							
6	1662.5	0		1656.7	0		1659.8	0		1631.1	1		1618.1	0							
7	1764.6	1		1693.19	0		1713.5	1		1527.88	0		1719.4	1							
8	1631.85	0		1738.22	1		1631.32	0		1570.11	0		1627.34	1							
9	1724.44	1		1670.29	0		1672.8	0		1605.14	1		1602.82	1							
10	1627.07	0		1682.94	1		1749.48	1		1595.92	0		1547.03	0							
11	1655.63	0		1622.06	0		1641.77	0		1639.62	0		1592.36	0							
12	1692.62	0		1628.93	0		1703.58	0		1681.8	1		1649.35	0							
13																					
14																					
15																					

Summary: Total Usable Shots: 120 Good Perforations below 1335 ft/s: 0 Good
 Perforations (Complete Penetrations): 38 Good
 Stops (Partial Penetrations): 82 Good

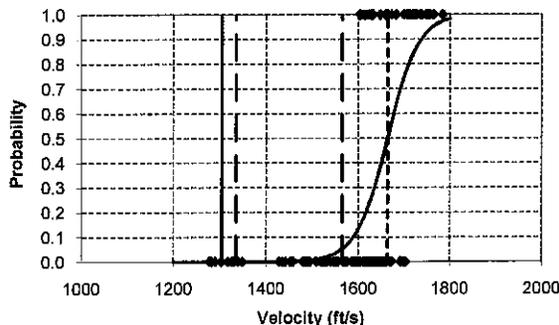
Test Data and Regression Model

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β_0 : -49.3
 β_1 : 0.030

Estimated V50: 1664 ft/s

Estimated V05: 1565 ft/s

Probability of perforation at NIJ reference velocity (1305 ft/sec): 0.0% Good



- ◆ Test Data
- V Ref.
- - V Ref. + 30
- ... Est. Response
- - - Est. V50
- Est. V05

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-60A Test ID: PPI09-000562 Report Date: 10/06/09
 Manufacturer: PROTECTIVE PRODUCTS INTERN Model Designation: DXF-II NIJ Armor Type: 2

Threat 2 - New Armor

Ammunition: .357 Mag 158/JSP Test Velocity: 1430 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 16			Sample 16			Sample 17			Sample 17			Sample 18		
	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)
1		1455.8	0		1465.0	0		1458.4	0		1454.8	0		1457.7	0
2		1540.6	1		1509.2	0		1511.3	0		1546.6	0		1530.0	0
3		1465.4	0		1562.3	0		1587.8	0		1651.5	0		1613.2	0
4		1523.7	0		1674.2	1		1702.1	1		1730.1	1		1748.0	1
5		1567.9	1		1606.4	1		1617.9	0		1636.9	1		1625.2	1
6		1526.7	0		1572.1	1		1691.8	1		1516.5	0		1553.5	1
7		1541.78	0		1529.99	1		1622.59	1		1573.32	1		1470.16	0
8		1601.54	1		1488.99	0		1575.55	0		1527.88	0		1531.16	0
9		1550.39	1		1508.3	0		1623.9	0		1566.66	0		1589.07	0
10		1529.05	0		1572.08	0		1693.19	0		1651.53	1		1638.27	1
11		1587.81	0		1592.61	0		1728.61	1		1601.8	1		1593.63	1
12		1596.93	1		1671.41	1		1694.63	1		1554.49	0		1581.53	0
13															
14															
15															

Shot Number	Sample 18			Sample 19			Sample 19			Sample 20			Sample 20		
	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)
1		1439.1	0		1431.0	0		1440.9	0		1447.2	0		1426.1	0
2		1552.8	1		1554.0	0		1540.6	1		1530.9	1		1528.8	0
3		1416.2	0		1648.0	1		1424.7	0		1419.2	0		1576.8	0
4		1493.0	0		1531.6	0		1510.1	0		1483.5	0		1668.3	1
5		1535.9	0		1598.2	0		1545.6	0		1547.3	1		1608.8	0
6		1595.2	0		1583.0	0		1579.3	1		1472.8	0		1626.0	1
7		1589.58	0		1714.68	1		1553.76	0		1518.38	0		1595.41	0
8		1684.64	1		1629.73	1		1604.37	0		1583.53	0		1617.34	0
9		1610.05	1		1617.6	1		1603.34	0		1584.04	0		1690.91	0
10		1599.24	0		1542.74	0		1748.56	1		1723.25	1		1728.91	1
11		1595.66	1		1576.79	1		1659.75	1		1633.72	1		1625.49	1
12		1588.57	0		1482.36	0		1549.67	0		1561.28	1		1553.52	1
13															
14															
15															

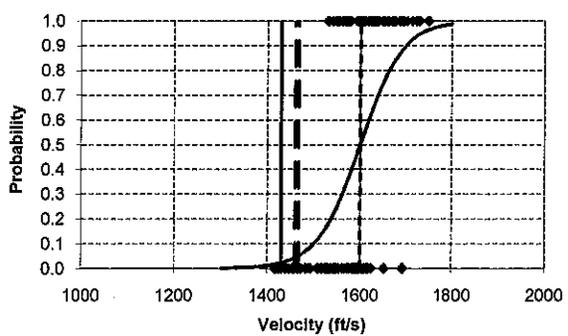
Summary: Total Usable Shots: 120 Good Perforations below 1460 ft/s: 0 Good
 Perforations (Complete Penetrations): 48 Good
 Stops (Partial Penetrations): 72 Good

Test Data and Regression Model

Regression Analysis
 Regression Model: **Logistic**
 Model Parameters: β_0 : -35.4
 β_1 : 0.022

Estimated V50: **1600 ft/s**
 Estimated V05: **1467 ft/s**

Probability of perforation at NIJ reference velocity (1305 ft/sec): **2.3% Good**



- ◆ Test Data
- V Ref.
- - V Ref. + 30
- Est. Response
- - - Est. V50
- - - Est. V05

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-60A Test ID: PPI09-000562 Report Date: 10/06/09
 Manufacturer: PROTECTIVE PRODUCTS INTER Model Designation: DXF-II NIJ Armor Type: 2

Threat 1 - Conditioned Armor
 Ammunition: 9mm 124/FMJ
 Test Velocity: 1245 ± 30 ft/s Cond: Dry

Threat 2 - Conditioned Armor
 Ammunition: .357 Mag 158/JSP
 Test Velocity: 1340 ± 30 ft/s Cond: Dry

Shot Number	Sample 25			Sample 25		
	Front	Panel	Perf	Back	Panel	Perf
	Avg. Vel. (ft/sec)	Y=1/N=0	Note	Avg. Vel. (ft/sec)	Y=1/N=0	Note
1	1244.7	0		1233.7	0	
2	1374.8	0		1385.8	0	
3	1548.2	0		1530.9	0	
4	1646.6	1		1589.1	0	
5	1563.5	0		1708.8	1	
6	1620.2	1		1645.5	1	
7	1523.69	0		1553.52	0	
8	1608.75	0		1636.93	1	
9	1651.8	1		1542.73	0	
10	1605.14	0		1589.07	0	
11	1661.68	0		1652.89	1	
12	1711.74	1		1541.07	0	
13						
14						
15						

Shot Num	Sample 26			Sample 26		
	Front	Panel	Perf	Back	Panel	Perf
	Avg. Vel. (ft/sec)	Y=1/N=0	Note	Avg. Vel. (ft/sec)	Y=1/N=0	Note
1	1342.5	0		1345.7	0	
2	1474.7	0		1451.2	0	
3	1590.1	1		1545.8	0	
4	1499.9	1		1619.2	1	
5	1398.2	0		1562.3	0	
6	1453.9	0		1580.0	0	
7	1514.47	0		1621.54	1	
8	1571.1	0		1595.92	1	
9	1600.52	0		1533.04	0	
10	1621.54	1		1605.14	1	
11	1560.07	1		1543.22	0	
12	1503.08	0		1597.19	1	
13						
14						
15						

Summary:
 Total Usable Shots: 24 Good
 Perforations (CP): 8
 Stops (PP): 16

 Perforations below 1275 ft/s: 0 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β0: -110.0
 β1: 0.068

 Estimated V50: 1625 ft/s

Summary:
 Total Usable Shots: 24 Good
 Perforations (CP): 9
 Stops (PP): 15

 Perforations below 1370 ft/s: 0 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β0: -54.8
 β1: 0.035

 Estimated V50: 1573 ft/s

Overall Ballistic Limit Summary	
Perforations below Vref + 30 ft/sec:	0
This armor model meets the low perforation velocity performance requirements of NIJ Standard-0101.06 Section 7.9.5.	
Probability of perforation at the P-BFS reference velocity	
Threat 1:	0.0%
Threat 2:	2.3%
This armor model meets the estimated V05 performance requirements of NIJ Standard-0101.06 Section 7.9.5.	

Compliance Test Report revision 354 (2009-03-09) / R version 2.9.0 (2009-04-17) / MS Excel version 12.0 / Operating System version Windows (32-bit) NT 5.01



U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

Washington, D.C. 20530

June 22, 2009

Alex F. Cejas,
Chief Operating Officer
Protective Products International Corp.
1649 NW 136th NW Avenue
Sunrise, FL 33323

Notice of Compliance with NIJ Standard-0101.06

Body Armor Model Designation: DX-III A

NIJ Compliance Status Expires: June 22, 2014

Dear Mr. Cejas:

We have completed our evaluation of the body armor model identified above that was submitted to the National Institute of Justice's (NIJ's) Voluntary Body Armor Compliance Testing Program. We are pleased to inform you that the above body armor model satisfies the requirements of NIJ Standard-0101.06 and the Compliance Testing Program.

We also received your completed declaration concerning the model noted above and your agreement to participate in the conformity assessment follow-up process.

The body armor model details are listed on the NIJ Compliant Products List available at www.justnet.org/CTP.

You are now authorized to place the NIJ Statement of Compliance on the labels of this body armor model and all subsequent production units. The Statement of Compliance shall read:

"This model of armor has been determined to comply with NIJ Standard-0101.06 by the NIJ Compliance Testing Program and is listed on the NIJ Compliant Products List."

All compliance requirements, as identified by the *NIJ Body Armor Compliance Testing Program Administrative Manual* and the *Ballistic Body Armor Applicant Package*, must be maintained as long as the NIJ Statement of Compliance is displayed on this armor model's labels. If, at any time, the compliance status of this armor model is changed, the NIJ Statement of Compliance shall cease to be used as of the date of the status change.

Sincerely,

John Morgan
Deputy Director for Science and Technology
National Institute of Justice

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Penetration and BFS Summary Data

Report Number: 11050-24C Test ID: PPI09-000396 Report Date: 04/03/09
 Manufacturer: TECIVE PRODUTS INTERNATIC Model Designation: DX-III NIJ Armor Type: 3A

Threat 1 - New Armor

Ammunition: .357 SIG 125/FMJ Test Velocity: 1470 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 1 Size: C5				Sample 2 Size: C5				Sample 3 Size: C5			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1467.6	0	27.0		1462.0	0	29.0		1467.1	0	27.0	
2	1452.4	0	27.0		1455.8	0	28.0		1457.1	0	28.0	
3	1469.9	0	29.0		1453.5	0	26.0		1472.1	0	28.0	
4	1472.3	0			1463.5	0			1461.8	0		
5	1473.6	0			1452.4	0			1473.2	0		
6	1482.8	0			1462.4	0			1465.0	0		
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 27.8 mm				
Maximum BFS: 29.0 mm				k1: 1.568				St. Dev.: 0.94 mm				
(Pass - No BFS greater than 44 mm)												

Shot Number	Sample 3 Size: C1				Sample 4 Size: C1				Sample 5 Size: C1			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1466.7	0	30.0		1488.8	0	29.0		1470.4	0	29.0	
2	1467.8	0	30.0		1488.8	0	31.0		1485.4	0	29.0	
3	1457.9	0	30.0		1488.1	0	28.0		1462.0	0	28.0	
4	1492.1	0			1475.4	0			1475.6	0		
5	1483.2	0			1471.7	0			1462.2	0		
6	1466.7	0			1482.8	0			1472.5	0		
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 29.2 mm				
Maximum BFS: 31.0 mm				k1: 1.568				St. Dev.: 1.11 mm				
(Pass - No BFS greater than 44 mm)												

Threat 2 - New Armor

Ammunition: .44 Mag 240/SJHP Test Velocity: 1430 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 5 Size: C5				Sample 6 Size: C5				Sample 7 Size: C5			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1437.2	0	35.0		1433.7	0	33.0		1425.9	0	39.0	
2	1412.6	0	35.0		1411.8	0	33.0		1428.0	0	33.0	
3	1428.4	0	32.0		1439.9	0	35.0		1428.4	0	36.0	
4	1424.9	0			1413.2	0			1440.9	0		
5	1420.7	0			1432.5	0			1437.8	0		
6	1428.8	0			1421.7	0			1439.5	0		
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 35.2 mm				
Maximum BFS: 39.0 mm				k1: 1.568				St. Dev.: 2.25 mm				
(Pass - No BFS greater than 44 mm)												

Shot Number	Sample 7 Size: C1				Sample 8 Size: C1				Sample 9 Size: C1			
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel	
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note
1	1432.9	0	38.0		1435.1	0	40.0		1429.0	0	40.0	
2	1448.9	0	37.0		1430.6	0	34.0		1439.9	0	38.0	
3	1435.6	0	38.0		1437.4	0	35.0		1444.5	0	35.0	
4	1435.6	0			1441.8	0			1422.3	0		
5	1428.2	0			1474.7	0			1441.8	0		
6												
7												
8												
Summary:												
Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 37.3 mm				
Maximum BFS: 40.0 mm				k1: 1.568				St. Dev.: 1.86 mm				
(Pass - No BFS greater than 44 mm)												

**NATIONAL INSTITUTE OF JUSTICE
COMPLIANCE TEST REPORT**

Penetration and BFS Summary Data

Report Number: 11050-24C Test ID: PPI09-000396 Report Date: 04/03/09
 Manufacturer: TECIVE PRODUTS INTERNATIC Model Designation: DX-IIIa NIJ Armor Type: 3A

Threat 1 - Conditioned Armor

Ammunition: .357 SIG 125/FMJ Test Velocity: 1410 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 21 Size: C5				Sample 22 Size: C1												
	Front Panel		Back Panel		Front Panel		Back Panel										
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	
1	1382.7	0	29.0		1386.8	0	27.0		1403.1	0	27.0		1406.5	0	30.0		
2	1397.0	0	26.0		1402.1	0	25.0		1407.5	0	29.0		1380.6	0	28.0		
3	1409.0	0	31.0		1389.7	0	27.0		1408.1	0	27.0		1413.2	0	27.0		
4	1385.0	0			1407.1	0			1387.7	0			1379.9	0			
5	1414.0	0			1394.9	0			1402.3	0			1391.0	0			
6	1399.8	0			1390.0	0			1401.7	0			1402.3	0			
7																	
8																	
Summary:		Perforations: 0 (Pass)				Perforations: 0 (Pass)				Perforations: 0 (Pass)				Perforations: 0 (Pass)			
		Maximum BFS: 31.0 mm (no requirement)				Maximum BFS: 31.0 mm (no requirement)				Maximum BFS: 30.0 mm (no requirement)				Maximum BFS: 30.0 mm (no requirement)			

Threat 2 - Conditioned Armor

Ammunition: .44 Mag 240/SJHP Test Velocity: 1340 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 23 Size: C5				Sample 24 Size: C1												
	Front Panel		Back Panel		Front Panel		Back Panel										
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	
1	1355.9	0	35.0		1338.2	0	34.0		1357.6	0	38.0		1338.2	0	34.0		
2	1347.4	0	35.0		1322.1	0	32.0		1383.1	0	36.0		1322.1	0	32.0		
3	1327.0	0	34.0		1349.5	0	33.0		1346.6	0	35.0		1349.5	0	33.0		
4	1349.2	0			1364.3	0			1325.9	0			1364.3	0			
5	1364.1	0			1313.7	0			1333.0	0			1313.7	0			
6	1337.3	0			1355.0	0							1355.0	0			
7																	
8																	
Summary:		Perforations: 0 (Pass)				Perforations: 0 (Pass)				Perforations: 0 (Pass)				Perforations: 0 (Pass)			
		Maximum BFS: 35.0 mm (no requirement)				Maximum BFS: 35.0 mm (no requirement)				Maximum BFS: 38.0 mm (no requirement)				Maximum BFS: 38.0 mm (no requirement)			

Overall P-BFS Summary

Perforations: 0	This armor model meets the perforation performance requirements of NIJ Standard-0101.06 Section 7.8.8.
Backface Signature	
Maximum BFS: 40.0 mm	This armor model meets the BFS performance requirements of NIJ Standard-0101.06 Section 7.8.8 Item a.

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-24C Test ID: PPI09-000396 Report Date: 04/03/09
 Manufacturer: PROTECTIVE PRODUCTS INTERNA Model Designation: DX-III A NIJ Armor Type: 3A
 Ammunition: .357 SIG 125/FMJ Threat 1 - New Armor Test Velocity: 1470 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 11			Sample 11			Sample 12			Sample 12			Sample 13		
	Front	Panel		Back	Panel		Front	Panel		Back	Panel		Front	Panel	
	Avg. Vel.	Perf	Note												
	(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)	
1	1466.5	0		1454.5	0		1443.0	0		1459.0	0		1471.5	0	
2	1580.3	0		1556.4	0		1569.9	0		1563.2	0		1573.8	0	
3	1727.7	0		1639.6	0		1665.0	0		1663.6	0		1701.3	0	
4	1802.1	0		1722.4	0		1743.4	0		1752.9	0		1817.5	0	
5	1868.5	1		1838.6	1		1837.2	0		1865.7	0		1935.7	1	
6	1762.1	0		1780.6	0		1943.3	1		1994.4	1		1866.7	0	
7	1813.96	0		1834.53	0		1917.18	1		1933.87	1		1918.65	1	
8	1885.02	0		1837.56	0		1831.5	1		1857.01	0		1874.77	1	
9	1948.56	1		1901.86	1		1741.86	0		1882.18	0		1812.58	0	
10	1849.8	0		1849.46	0		1842.98	0		1936.86	0		1839.93	0	
11	1893.94	1		1931.25	1		1835.2	1		2018.58	1		1916.81	1	
12	1858.39	0		1842.3	0		1845.02	0		1967.35	1		1909.13	1	
13	1892.15	0		1904.04	1		1844	0		1918.28	0		1863.59	0	
14	1955.04	1		1831.17	0		1943.26	1		1979.03	1		1854.6	0	
15	1890.36	0		1876.53	1		1889.65	0		1955.8	1		1958.48	0	

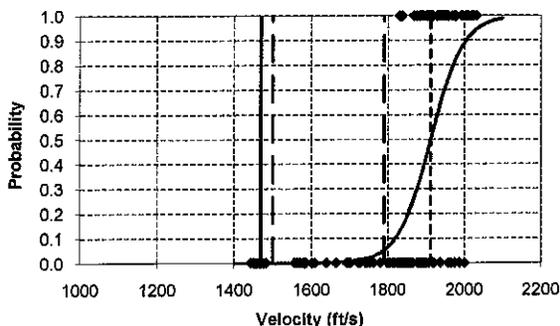
Shot Number	Sample 13			Sample 14			Sample 14			Sample 15			Sample 15		
	Back	Panel		Front	Panel		Back	Panel		Front	Panel		Back	Panel	
	Avg. Vel.	Perf	Note												
	(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)		(ft/sec)	(Y=1/N=0)	
1	1450.8	0		1469.1	0		1483.0	0		1455.0	0		1477.1	0	
2	1609.0	0		1583.3	0		1582.3	0		1602.3	0		1586.5	0	
3	1726.5	0		1697.2	0		1694.6	0		1696.4	0		1692.0	0	
4	1843.7	0		1811.9	0		1804.4	0		1798.6	0		1825.8	0	
5	1901.5	1		1888.9	1		1896.5	0		1883.9	1		1881.8	1	
6	1832.2	0		1838.2	0		1996.4	1		1861.9	0		1865.0	0	
7	1889.65	1		1937.61	0		1958.1	1		1908.03	0		1889.65	0	
8	1860.12	0		1949.32	1		1921.23	0		1986.49	0		1975.12	0	
9	1901.14	0		1913.51	1		1838.24	0		2007.23	1		2032.52	1	
10	1974.34	1		1890.72	0		1891.44	0		1958.1	0		1965.41	0	
11	1936.48	1		1928.27	1		1917.92	0		1898.26	0		2023.47	1	
12	1915.71	1		1878.29	0		2000.8	0		1987.28	0		1995.21	1	
13	1833.18	0		1917.55	1		2011.27	1		2005.62	1		1954.27	1	
14	1888.57	0		1908.03	0		1992.43	1		1978.63	1		1931.25	1	
15	1945.91	1		1979.02	1		1915.34	1		1917.92	0		1817.85	0	

Summary: Total Usable Shots: 150 Good Perforations below 1500 ft/s: 0 Good
 Perforations (Complete Penetrations): 52 Good
 Stops (Partial Penetrations): 98 Good

Test Data and Regression Model

Regression Analysis
 Regression Model: **Logistic**
 Model Parameters: β_0 : -45.7
 β_1 : 0.024
 Estimated V50: **1913 ft/s**
 Estimated V05: **1789 ft/s**

Probability of perforation at NIJ reference velocity (1470 ft/sec): **0.0% Good**



- Test Data
- V Ref.
- - V Ref. + 30
- Est. Response
- · · Est. V50
- - - Est. V05

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-24C Test ID: PPI09-000396 Report Date: 04/03/09
 Manufacturer: PROTECTIVE PRODUCTS INTERNATIONAL Model Designation: DX-III A NIJ Armor Type: 3A
 Threat 2 - New Armor
 Ammunition: .44 Mag 240/SJHP Test Velocity: 1430 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 16			Sample 16			Sample 17			Sample 17			Sample 18		
	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note
1		1426.9	0		1419.2	0		1435.6	0		1444.9	0		1420.3	0
2		1551.4	0		1509.7	0		1576.5	0		1565.0	0		1541.1	0
3		1617.3	0		1646.1	0		1655.4	0		1675.3	0		1655.9	0
4		1691.8	0		1747.7	0		1745.5	0		1764.9	0		1741.9	0
5		1784.1	1		1785.4	1		1800.5	0		1826.2	0		1804.1	0
6		1724.7	1		1713.5	0		1860.5	1		1903.7	1		1897.5	1
7		1646.1	0		1754.7	1		1775.57	1		1782.22	1		1818.86	1
8		1698.66	0		1760.26	0		1719.99	0		1776.21	0		1769.61	0
9		1727.42	0		1788.28	0		1782.54	1		1800.19	1		1791.16	1
10		1758.71	0		1810.94	1		1734.31	0		1785.4	1		1756.55	0
11		1795.02	1		1772.74	0		1802.46	1		1737.33	1		1817.53	1
12		1771.49	1		1814.56	0		1777.16	1		1666.67	0		1787.64	0
13		1748.87	1		1863.24	1									
14		1707.07	0		1797.6	0									
15		1755.93	0		1866.03	1									

Shot Number	Sample 18			Sample 19			Sample 19			Sample 20			Sample 20		
	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Front Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note	Back Panel	Avg. Vel. (ft/sec)	Perf (Y=1/N=0) Note
1		1443.2	0		1458.8	0		1456.5	0		1452.4	0		1450.3	0
2		1559.6	0		1570.6	0		1586.3	0		1585.6	0		1590.1	0
3		1678.4	0		1678.4	0		1695.2	0		1681.5	0		1703.9	0
4		1805.7	0		1792.1	0		1799.5	0		1781.9	1		1828.2	1
5		1868.1	1		1838.2	1		1874.1	0		1710.6	0		1758.7	1
6		1799.2	1		1764.3	1		1979.4	1		1750.7	0		1785.1	0
7		1822.16	1		1709.71	1		1897.9	1		1783.81	0		1810.29	1
8		1774.95	0		1660.59	0		1816.54	0		1801.81	1		1785.08	1
9		1820.51	1		1709.12	0		1894.31	1		1787.32	0		1738.84	0
10		1777.47	0		1789.24	0		1823.16	0		1823.16	1		1769.61	0
11		1800.51	1		1808.32	1		1887.87	1		1804.09	1		1795.99	1
12		1760.57	1		1767.73	0		1842.31	1		1758.1	0		1782.86	0
13															
14															
15															

Summary: Total Usable Shots: 126 Good Perforations below 1460 ft/s: 0 Good
 Perforations (Complete Penetrations): 48 Good
 Stops (Partial Penetrations): 78 Good

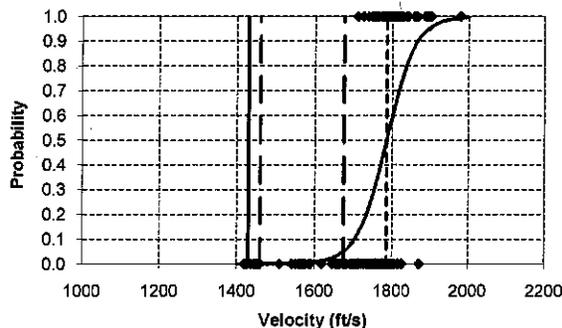
Test Data and Regression Model

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β_0 : -47.4
 β_1 : 0.027

Estimated V50: 1786 ft/s

Estimated V05: 1675 ft/s

Probability of perforation at NIJ reference velocity (1470 ft/sec): 0.0% Good



- Test Data
- V Ref.
- - V Ref. + 30
- Est. Response
- - - Est. V50
- - - Est. V05

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-24C Test ID: PPI09-000396 Report Date: 04/03/09
 Manufacturer: PROTECTIVE PRODUCTS INTERNA1 Model Designation: DX-III A NIJ Armor Type: 3A

Threat 1 - Conditioned Armor
 Ammunition: .357 SIG 125/FMJ
 Test Velocity: 1410 ± 30 ft/s Cond: Dry

Threat 2 - Conditioned Armor
 Ammunition: .44 Mag 240/SJHP
 Test Velocity: 1340 ± 30 ft/s Cond: Dry

Shot Number	Sample 25			Sample 25		
	Front Panel	Perf	Note	Back Panel	Perf	Note
	Avg. Vel. (ft/sec)	(Y=1/N=0)		Avg. Vel. (ft/sec)	(Y=1/N=0)	
1	1410.0	0		1422.7	0	
2	1481.3	0		1558.8	0	
3	1528.6	0		1623.1	0	
4	1596.9	0		1722.7	0	
5	1688.9	0		1798.2	0	
6	1775.3	0		1880.8	1	
7	1840.94	1		1844.34	0	
8	1811.6	1		1882.89	0	
9	1739.74	0		1938.36	1	
10	1775.25	0		1920.12	1	
11	1840.61	1		1858.05	1	
12	1828.15	0		1782.53	0	
13						
14						
15						

Summary:
 Total Usable Shots: 24 Good
 Perforations (CP): 7
 Stops (PP): 17

 Perforations below 1440 ft/s: 0 Good

Regression Analysis
 Regression Model: **Logistic**
 Model Parameters: β_0 : -65.5
 β_1 : 0.036

 Estimated V50: **1839 ft/s**

Shot Num	Sample 26			Sample 26		
	Front Panel	Perf	Note	Back Panel	Perf	Note
	Avg. Vel. (ft/sec)	(Y=1/N=0)		Avg. Vel. (ft/sec)	(Y=1/N=0)	
1	1345.7	0		1353.7	0	
2	1431.8	0		1456.5	0	
3	1532.8	0		1602.1	0	
4	1622.1	0		1694.3	0	
5	1762.1	0		1774.9	0	
6	1906.6	1		1833.2	0	
7	1801.48	0		1933.49	0	
8	1866.02	1		1980.2	1	
9	1783.49	1		1886.09	0	
10	1743.08	0		1947.81	1	
11	1798.56	1		1915.71	1	
12	1746.42	1		1865.33	0	
13						
14						
15						

Summary:
 Total Usable Shots: 24 Good
 Perforations (CP): 8
 Stops (PP): 16

 Perforations below 1370 ft/s: 0 Good

Regression Analysis
 Regression Model: **Logistic**
 Model Parameters: β_0 : -21.9
 β_1 : 0.012

 Estimated V50: **1853 ft/s**

Overall Ballistic Limit Summary	
Perforations below Vref + 30 ft/sec:	0
This armor model meets the low perforation velocity performance requirements of NIJ Standard-0101.06 Section 7.9.5.	
Probability of perforation at the P-BFS reference velocity	
Threat 1:	0.0%
Threat 2:	0.0%
This armor model meets the estimated V05 performance requirements of NIJ Standard-0101.06 Section 7.9.5.	

Compliance Test Report revision 354 (2009-03-09) / R version 2.9.0 (2009-04-17) / MS Excel version 12.0 / Operating System version Windows (32-bit) NT 5.01



U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

Washington, D.C. 20530

November 4, 2009

R. Patrick Caldwell
Chief Executive Officer
Protective Products International Corp.
1649 NW 136th NW Avenue
Sunrise, FL 33323

Notice of Compliance with NIJ Standard-0101.06
Body Armor Model Designation: DXF-III A
NIJ Compliance Status Expires: November 4, 2014

Dear Mr. Caldwell:

We have completed our evaluation of the body armor model identified above that was submitted to the National Institute of Justice's (NIJ's) Voluntary Body Armor Compliance Testing Program. We are pleased to inform you that the above body armor model satisfies the requirements of NIJ Standard-0101.06 and the Compliance Testing Program.

We also received your completed declaration concerning the model noted above and your agreement to participate in the conformity assessment follow-up process.

The body armor model details are listed on the NIJ Compliant Products List available at www.justnet.org/CTP.

You are now authorized to place the NIJ Statement of Compliance on the labels of this body armor model and all subsequent production units. The Statement of Compliance shall read:

"This model of armor has been determined to comply with NIJ Standard-0101.06 by the NIJ Compliance Testing Program and is listed on the NIJ Compliant Products List."

All compliance requirements, as identified by the *NIJ Body Armor Compliance Testing Program Administrative Manual* and the *Ballistic Body Armor Applicant Package*, must be maintained as long as the NIJ Statement of Compliance is displayed on this armor model's labels. If, at any time, the compliance status of this armor model is changed, the NIJ Statement of Compliance shall cease to be used as of the date of the status change.

Sincerely,

Debra Stoe
Physical Scientist
National Institute of Justice

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Penetration and BFS Summary Data

Report Number: 11050-44A Test ID: PPI09-000447 Report Date: 07/07/09
 Manufacturer: ECTIVE PRODUCTS INTERNAT Model Designation: DXF-III A NIJ Armor Type: 3A
 Ammunition: .357 SIG 125/FMJ Threat 1 - New Armor Test Velocity: 1470 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 1 Size: C5				Sample 2 Size: C5				Sample 3 Size: C5						
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel				
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note			
1	1468.4	0	28.0		1473.8	0	30.0		1489.9	0	28.0		1498.4	0	29.0
2	1465.2	0	30.0		1497.7	0	28.0		1469.7	0	29.0		1478.6	0	31.0
3	1456.0	0	29.0		1472.8	0	32.0		1487.9	0	29.0		1487.4	0	31.0
4	1479.5	0		g	1459.6	0			1473.6	0		g	1455.0	0	
5	1494.5	0		g	1463.3	0			1467.1	0		g	1491.0	0	
6	1483.5	0			1469.9	0			1479.9	0			1483.7	0	
7															
8															
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 29.5 mm					
		Maximum BFS: 32.0 mm				k1: 1.568				St. Dev.: 1.31 mm					
(Pass - No BFS greater than 44 mm)															

Shot Number	Sample 3 Size: C1				Sample 4 Size: C1				Sample 5 Size: C1						
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel				
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note			
1	1481.0	0	29.0		1459.9	0	28.0		1476.2	0	28.0		1493.7	0	30.0
2	1495.0	0	29.0		1499.7	0	28.0		1473.8	0	30.0		1471.5	0	29.0
3	1455.0	0	29.0		1450.1	0	28.0		1500.8	0	28.0		1470.4	0	28.0
4	1475.6	0		g	1497.7	0			1495.4	0		g	1472.8	0	
5	1479.5	0		g	1488.8	0			1480.2	0		g	1479.1	0	
6	1467.1	0			1489.0	0			1483.7	0			1496.3	0	
7															
8															
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 28.7 mm					
		Maximum BFS: 30.0 mm				k1: 1.568				St. Dev.: 0.78 mm					
(Pass - No BFS greater than 44 mm)															

Threat 2 - New Armor
 Ammunition: .44 Mag 240/SJHP Test Velocity: 1430 ± 30 ft/s Conditioning: Wet

Shot Number	Sample 5 Size: C5				Sample 6 Size: C5				Sample 7 Size: C5						
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel				
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note			
1	1463.7	0	34.0		1453.7	0	37.0		1468.4	0	35.0		1455.0	0	34.0
2	1451.6	0	36.0		1475.1	0	36.0		1470.4	0	39.0		1423.9	0	34.0
3	1469.5	0	35.0		1468.9	0	37.0		1441.3	0	38.0		1435.3	0	36.0
4	1460.9	0		g	1459.9	0			1459.4	0		g	1429.4	0	
5	1439.9	0		g	1446.1	0			1467.6	0		g	1461.6	0	
6	1449.1	0			1449.9	0			1456.9	0			1427.4	0	
7															
8															
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 35.9 mm					
		Maximum BFS: 39.0 mm				k1: 1.568				St. Dev.: 1.62 mm					
(Pass - No BFS greater than 44 mm)															

Shot Number	Sample 7 Size: C1				Sample 8 Size: C1				Sample 9 Size: C1						
	Front Panel		Back Panel		Front Panel		Back Panel		Front Panel		Back Panel				
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note			
1	1482.6	0	38.0		1484.8	0	40.0		1445.3	0	37.0		1443.6	0	38.0
2	1456.0	0	41.0		1461.4	0	40.0		1467.4	0	44.0		1435.5	0	35.0
3	1465.4	0	38.0		1474.7	0	38.0		1447.4	0	36.0		1440.7	0	36.0
4	1450.3	0		g	1451.2	0			1478.6	0		g	1449.3	0	
5	1465.4	0		g	1447.6	0			1448.2	0		g	1478.4	0	
6															
7															
8															
Summary:		Perforations: 0 (Pass)				BFS Statistics: Count: 12				Average: 38.4 mm					
		Maximum BFS: 44.0 mm				k1: 1.568				St. Dev.: 2.50 mm					
(Pass - No BFS greater than 44 mm)															

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Penetration and BFS Summary Data

Report Number: 11050-44A Test ID: PP109-000447 Report Date: 07/07/09
 Manufacturer: ECTIVE PRODUCTS INTERNAT Model Designation: DXF-III A NIJ Armor Type: 3A

Threat 1 - Conditioned Armor
 Ammunition: .357 SIG 125/FMJ Test Velocity: 1410 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 21 Size: C1				Sample 22 Size: C5				
	Front Panel		Back Panel		Front Panel		Back Panel		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	
1	1411.4	0	25.0		1415.0	0	23.0		
2	1407.9	0	28.0		1422.3	0	32.0		
3	1392.0	0	30.0		1411.4	0	30.0		
4	1415.0	0		g	1406.9	0		g	
5	1416.8	0		g	1405.3	0		g	
6	1411.4	0			1399.0	0			
7									
8									
Summary:		Perforations: 0 (Pass) Maximum BFS: 30.0 mm (no requirement)				Perforations: 0 (Pass) Maximum BFS: 32.0 mm (no requirement)			

Threat 2 - Conditioned Armor
 Ammunition: .44 Mag 240/SJHP Test Velocity: 1340 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 23 Size: C1				Sample 24 Size: C5				
	Front Panel		Back Panel		Front Panel		Back Panel		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	BFS (mm)	Note	
1	1341.6	0	34.0		1355.4	0	36.0		
2	1314.6	0	32.0		1333.5	0	36.0		
3	1328.7	0	34.0		1346.4	0	40.0		
4	1332.6	0		g	1344.8	0			
5	1346.4	0		g	1369.7	0			
6									
7									
8									
Summary:		Perforations: 0 (Pass) Maximum BFS: 40.0 mm (no requirement)				Perforations: 0 (Pass) Maximum BFS: 37.0 mm (no requirement)			

Overall P-BFS Summary	
Perforations:	0 This armor model meets the perforation performance requirements of NIJ Standard-0101.06 Section 7.8.8.
Backface Signature	
Maximum BFS:	44.0 mm
	This armor model meets the BFS performance requirements of NIJ Standard-0101.06 Section 7.8.8 Item a.

Compliance Test Report revision 354 (2009-03-09) / R version 2.9.0 (2009-04-17) / MS Excel version 12.0 / Operating System version Windows (32-bit) NT 5.01

NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-44A Test ID: PPI09-000447 Report Date: 07/07/09
 Manufacturer: PROTECTIVE PRODUCTS INTERNATIONAL Model Designation: DXF-III A NIJ Armor Type: 3A

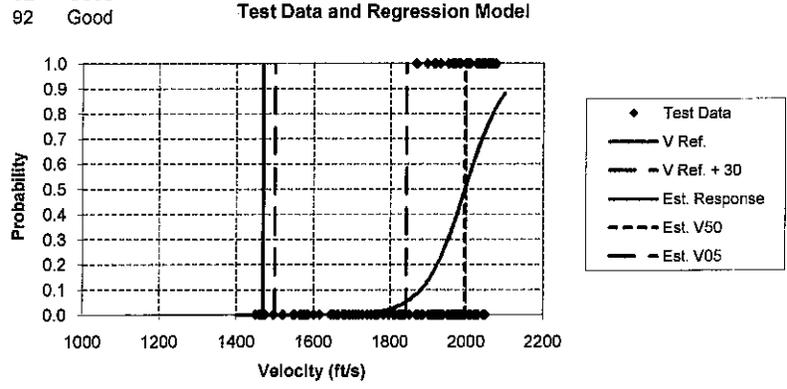
Threat 1 - New Armor Test Velocity: 1470 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 11			Sample 11			Sample 12			Sample 12			Sample 13		
	Front	Panel	Perf	Back	Panel	Perf	Front	Panel	Perf	Back	Panel	Perf	Front	Panel	Perf
	Avg. Vel.			Avg. Vel.			Avg. Vel.			Avg. Vel.			Avg. Vel.		
	(ft/sec)	(Y=1/N=0)	Note												
1	1497.0	0		1474.9	0		1467.4	0		1459.6	0		1495.7	0	
2	1548.0	0		1564.5	0		1585.8	0		1551.4	0		1575.5	0	
3	1661.4	0		1645.5	0		1664.2	0		1646.6	0		1694.3	0	
4	1710.0	0		1740.9	0		1740.9	0		1749.2	0		1717.9	0	
5	1797.3	0		1838.9	0		1822.5	0		1834.5	0		1767.1	0	
6	1938.4	0		1885.7	0		1882.5	0		1874.4	0		1908.4	0	
7	1852.54	0		1938.36	0		1955.42	0		1931.62	0		2024.71	0	
8	1939.87	0		2047.09	1		2028.82	0		2006.83	0		2070.39	1	
9	1965.8	0		1962.32	0		2041.65	1		1986.89	0		2056.78	1	
10	1979.81	0		2030.46	0		2028.82	1		2049.18	0		2021.02	0	
11	1972.78	0		2004.81	1		1981.38	1		2045.41	1		2060.58	1	
12	1977.85	0		2010.06	1		1920.12	0		2041.65	1		2039.57	1	
13	1996.01	0								1998.8	1				
14	2055.08	1													
15	2043.74	0													

Shot Number	Sample 13			Sample 14			Sample 14			Sample 15			Sample 15		
	Back	Panel	Perf	Front	Panel	Perf	Back	Panel	Perf	Front	Panel	Perf	Back	Panel	Perf
	Avg. Vel.			Avg. Vel.			Avg. Vel.			Avg. Vel.			Avg. Vel.		
	(ft/sec)	(Y=1/N=0)	Note												
1	1450.1	0		1464.6	0		1520.7	0		1470.4	0		1496.8	0	
2	1600.5	0		1582.3	0		1652.9	0		1569.1	0		1616.6	0	
3	1702.4	0		1693.2	0		1808.7	0		1682.4	0		1676.7	0	
4	1811.9	0		1727.4	0		1835.9	0		1759.6	0		1781.6	0	
5	1868.1	0		1823.8	0		1952.0	0		1823.5	0		1868.8	1	
6	1983.3	1		1919.8	0		1978.2	1		1928.3	0		1796.0	0	
7	1873.01	0		1992.44	0		1962.32	1		1992.83	0		1828.49	0	
8	1974.34	0		2034.18	1		1901.86	0		2012.07	0		1872.66	0	
9	1971.23	1		2010.06	0		1914.98	1		2042.9	1		1914.98	0	
10	1764.29	0		2041.67	1		1852.89	0		1997.6	0		1965.8	1	
11	1951.98	1		2064.41	1		1931.62	1		2076.41	1		1918.28	1	
12	1924.93	0		2043.74	1		1908.4	0		2026.75	1		1896.09	1	
13															
14															
15															

Summary: Total Usable Shots: 124 Good Perforations below 1500 ft/s: 0 Good
 Perforations (Complete Penetrations): 32 Good
 Stops (Partial Penetrations): 92 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β_0 : -38.4
 β_1 : 0.019
 Estimated V50: 1996 ft/s
 Estimated V05: 1843 ft/s
 Probability of perforation at NIJ reference velocity (1470 ft/sec): 0.0% Good



NATIONAL INSTITUTE OF JUSTICE COMPLIANCE TEST REPORT

Ballistic Limit Summary Data

Report Number: 11050-44A Test ID: PPI09-00047 Report Date: 07/07/09
 Manufacturer: PROTECTIVE PRODUCTS INTER Model Designation: DXF-III NIJ Armor Type: 3A

Threat 2 - New Armor

Ammunition: .44 Mag 240/SJHP Test Velocity: 1430 ± 30 ft/s Conditioning: Dry

Shot Number	Sample 16 Front Panel			Sample 16 Back Panel			Sample 17 Front Panel			Sample 17 Back Panel			Sample 18 Front Panel			Sample 18 Back Panel		
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note
1	1405.7	0		1427.3	0		1460.1	0		1425.9	0		1425.9	0		1425.9	0	
2	1539.4	0		1567.9	0		1581.5	0		1557.4	0		1524.9	0		1524.9	0	
3	1703.6	0		1686.6	0		1695.8	0		1666.4	0		1656.5	0		1656.5	0	
4	1811.9	1		1774.3	0		1784.1	0		1760.3	0		1774.3	0		1774.3	0	
5	1688.0	0		1869.9	1		1871.6	1		1834.5	1		1860.5	1		1860.5	1	
6	1781.6	0		1803.1	1		1788.6	0		1772.7	0		1764.6	0		1764.6	0	
7	1816.54	0		1712.63	0		1841.96	0		1822.49	1		1779.99	0		1779.99	0	
8	1884.31	0		1760.88	0		1884.31	0		1757.47	0		1843.32	1		1843.32	1	
9	1901.86	0		1848.09	1		1923.45	0		1811.92	0		1696.96	0		1696.96	0	
10	1945.15	0		1740.95	1		1953.51	1		1871.26	1		1859.09	0		1859.09	0	
11	1962.32	1		1699.82	0		1931.62	0		1808.98	0		1910.23	1		1910.23	1	
12	1940.24	1		1740.95	0		1939.87	1		1846.73	0		1893.59	1		1893.59	1	
13																		
14																		
15																		

Shot Number	Sample 18 Back Panel			Sample 19 Front Panel			Sample 19 Back Panel			Sample 20 Front Panel			Sample 20 Back Panel					
	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note	Avg. Vel. (ft/sec)	Perf (Y=1/N=0)	Note			
1	1432.3	0		1416.0	0		1470.4	0		1613.9	0		1428.8	0				
2	1582.3	0		1577.8	0		1572.1	0		1728.6	0		1541.5	0				
3	1684.4	0		1657.8	0		1669.2	0		1830.8	1		1660.9	0				
4	1794.4	0		1726.2	1		1757.5	1		1740.9	0		1773.0	1				
5	1901.9	1		1665.3	0		1652.9	0		1784.1	0		1643.4	0				
6	1823.8	1		1717.3	0		1712.6	0		1825.8	0		1680.7	0				
7	1763.05	1		1771.49	0		1767.1	1		1892.51	0		1781.58	0				
8	1729.51	1		1814.89	0		1720.88	0		1958.1	1		1833.52	1				
9	1682.94	0		1834.53	1		1761.5	0		1904.76	1		1754.08	1				
10	1728.61	0		1803.11	0		1811.93	1		1854.26	0		1713.5	0				
11	1785.73	1		1852.89	1		1754.7	1		1905.13	1		1759.94	1				
12	1705.03	0		1798.56	1		1704.17	1		1860.12	0		1711.74	1				
13																		
14																		
15																		

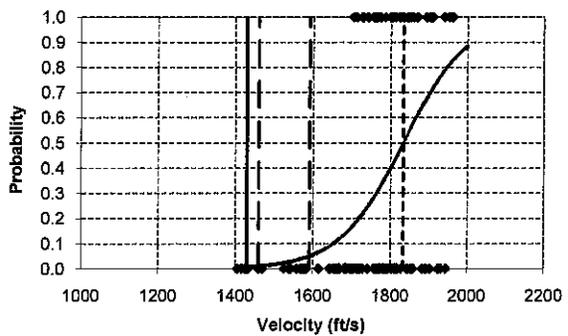
Summary: Total Usable Shots: 120 Good Perforations below 1460 ft/s: 0 Good
 Perforations (Complete Penetrations): 40 Good
 Stops (Partial Penetrations): 80 Good

Test Data and Regression Model

Regression Analysis
 Regression Model: **Logistic**
 Model Parameters: β_0 : -22.3
 β_1 : 0.012

Estimated V50: **1834 ft/s**
 Estimated V05: **1592 ft/s**

Probability of perforation at NIJ reference velocity (1470 ft/sec): **0.7% Good**



◆ Test Data
 — V Ref.
 - - V Ref. + 30
 — Est. Response
 - - - Est. V50
 - - - Est. V05

**NATIONAL INSTITUTE OF JUSTICE
COMPLIANCE TEST REPORT**

Ballistic Limit Summary Data

Report Number: 11050-44A Test ID: PPI09-000447 Report Date: 07/07/09
 Manufacturer: PROTECTIVE PRODUCTS INTERNATIONAL Model Designation: DXF-III A NIJ Armor Type: 3A

Threat 1 - Conditioned Armor
 Ammunition: .357 SIG 125/FMJ
 Test Velocity: 1410 ± 30 ft/s Cond: Dry

Threat 2 - Conditioned Armor
 Ammunition: .44 Mag 240/SJHP
 Test Velocity: 1340 ± 30 ft/s Cond: Dry

Shot Number	Sample 25			Sample 25		
	Front	Panel	Perf	Back	Panel	Perf
	Avg. Vel. (ft/sec)	(Y=1/N=0)	Note	Avg. Vel. (ft/sec)	(Y=1/N=0)	Note
1	1384.1	0		1411.4	0	
2	1529.1	0		1564.5	0	
3	1664.2	0		1662.8	0	
4	1761.8	0		1788.6	1	
5	1868.1	1		1711.5	0	
6	1809.0	0		1777.1	0	
7	1843.66	1		1814.88	0	
8	1794.37	0		1885.73	0	
9	1838.91	0		1896.81	1	
10	1873.01	0		1848.09	0	
11	1905.13	1		1914.98	1	
12	1854.26	1		1884.31	1	
13						
14						
15						

Summary:
 Total Usable Shots: 24 Good
 Perforations (CP): 8
 Stops (PP): 16
 Perforations below 1440 ft/s: 0 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β_0 : -53.6
 β_1 : 0.029
 Estimated V50: 1852 ft/s

Shot Num	Sample 26			Sample 26		
	Front	Panel	Perf	Back	Panel	Perf
	Avg. Vel. (ft/sec)	(Y=1/N=0)	Note	Avg. Vel. (ft/sec)	(Y=1/N=0)	Note
1	1425.9	0		1399.0	0	
2	1369.3	0		1518.4	0	
3	1523.7	0		1594.9	0	
4	1628.7	0		1693.2	0	
5	1718.2	1		1772.7	1	
6	1652.9	0		1716.7	1	
7	1710.28	1		1657.83	0	
8	1652.89	0		1727.42	0	
9	1681.52	1		1747.64	1	
10	1640.69	0		1714.09	0	
11	1684.07	0		1765.85	1	
12	1740.95	0		1705.03	0	
13						
14						
15						

Summary:
 Total Usable Shots: 24 Good
 Perforations (CP): 7
 Stops (PP): 17
 Perforations below 1370 ft/s: 0 Good

Regression Analysis
 Regression Model: Logistic
 Model Parameters: β_0 : -70.5
 β_1 : 0.041
 Estimated V50: 1718 ft/s

Overall Ballistic Limit Summary	
Perforations below Vref + 30 ft/sec:	0
This armor model meets the low perforation velocity performance requirements of NIJ Standard-0101.06 Section 7.9.5.	
Probability of perforation at the P-BFS reference velocity	
Threat 1:	0.0%
Threat 2:	0.7%
This armor model meets the estimated V05 performance requirements of NIJ Standard-0101.06 Section 7.9.5.	

Compliance Test Report revision 354 (2009-03-09) / R version 2.9.0 (2009-04-17) / MS Excel version 12.0 / Operating System version Windows (32-bit) NT 5.01

Limited Warranty Information

Ballistic Panels

If your ballistic panels are labeled in compliance with NIJ Interim 2005 or NIJ 2006 Requirements, or meeting the performance requirements for NIJ Standard 0101.04, or NIJ Standard 0101.03 then Protective Products Enterprises warrants that for a period of five (5) years from the date of the purchase, the panels will conform to the minimum requirements of the NIJ protocol for ballistic intervention during an actual confrontation at the stated threat level (if your ballistic panels are not labeled in compliance with NIJ 2005 or NIJ 2006 interim requirements, NIJ Standard 0101.04, or NIJ Standard 0101.03, then this warranty does not apply to your panels).

This warranty is subject to, and expressly conditioned upon, strict compliance with the following conditions:

- The panel must not be torn, damaged, or altered in any way.
- The panel must not be subjected to abuse or misuse during service.
- The panel may only be used or placed in a cover or carrier that is furnished by Protective Products for the specific vest which it is designed or intended for.
- The panel must not be permitted to be excessively wet.
- The panel must not be subjected to excessive heat.
- The panel must be properly stored (i.e., not in excessively hot or damp conditions).
- Use of the panel must, at all times, be in compliance with all applicable directions, instructions and recommendations furnished by Protective Products Enterprises. In the event that any one or more of the foregoing conditions is breached or violated, then the warranty of conformity with NIJ standards shall be null and void and without force and effect.

Tactical Nylon Covers

Protective Products Enterprises fully warrants nylon covers against any defects in workmanship or materials for thirty-six (36) months after the date of purchase.

Removable Covers

Protective Products Enterprises warrants removable, machine-washable covers against defects in workmanship or materials for twenty-four (24) months after the date of purchase.

Replacement Policies

Protective Products Enterprises will replace your vest free of charge if your vest should become damaged during an actual **ON-DUTY CONFRONTATION** with a firearm projectile or a sharp and/or blunt instrument and/or during an **ON-DUTY** automobile accident. The damaged vest and a copy of the department certification of the incident involving the damaging of the vest is required, and should be sent to Protective Products Enterprises, 1649 NW 136th Avenue, Sunrise FL 33325, telephone number (954) 846-8222, as soon as they become available. Protective Products Enterprises will issue a new vest as soon as all records of the occurrence are confirmed.



Delivery Schedule

Protective Products Enterprises will deliver 30 – 45 days ARO for the City of Fort Lauderdale contract.



PROTECTIVE PRODUCTS

The Protective Products facility is located in Sunrise, Florida. Over the years, Protective Products has continued to refine production and manufacturing processes within our state-of-the-art facilities. We are fully climate controlled in order to regulate storage temperature to protect raw ballistic fabric as well as provide our employees with a comfortable working environment. This continued refinement has led to increased productivity that translates into a cost savings that the company can directly pass along to our customers.

Our 128,000 square foot manufacturing facility in Sunrise, Florida, operates Monday to Friday, 8:00 AM to 4:30 PM. There are currently 10 cutters and 43 sewers working in a two level facility. All ballistic cutting is done on the first level and sent to its perspective production line. In order to ensure consistent and timely product realization, Domestic Law Enforcement, Military, and Government contracts each have their own designated production line. Our highly trained and experienced manufacturing personnel are also cross-trained to operated more than one type of machine. Approximately 30% of our manufacturing personnel are experienced on several types of sewing machines.

Our unique ceramic manufacturing capabilities can give armor integrators more flexibility in their armor and design objectives to redirect energy and defeat the threats. Full Reaction Bonded Ceramic Solutions include silicon carbide and boron carbide panels, ceramic compositions that can be modified to tailor specific price/weight performance of customers' requirements and actively developing novel processes for manufacturing of large direct sintered silicon carbide panels. Curved and complex ceramic shapes using our unique pressure casting process are manufactured by the programmable Computer Numerically Controlled (CNC) milling center. We offer textured strike face capabilities along with contoured strike face designs for energy/projectile redirection.

At Protective Products, an in house Protective Technology Development Center is maintained. This includes CAD, design, prototyping, and ballistic research and development resources.

A fully integrated armor prototyping and testing facility complete with high caliber shooting ranges, environmental conditioning chambers, physical property testing equipment and more, to ensure we meet the needs of our customers.



PROTECTIVE PRODUCTS

Protective Products is an ISO 9001 Certified Company. Our Quality Plan establishes procedures for every aspect of the manufacturing operation. All DX ballistic materials meet and exceed NIJ 0101.06 standards and have their respective NIJ Compliance Letters. Our remaining Ballistic packages are NIJ 0101.04 and NIJ 05 Interim compliant.

Along with the production at the facility, our 22, 000 square foot corporate office is also located here. This allows the dedicated Customer Relations Associate and Managers access to the production line of the contract.

Measurement and fitting of vests is a critical aspect to the manufacturing of our products. Protective Products utilizes only highly qualified and experienced personnel to ensure each vest fits properly and is comfortable.

The Protective Products Team has over 17 years of direct relevant past performance in the manufacturing and delivering of body armor. We offer a best value armor package with product improvements that not only meet but exceed the NIJ standards.

In order to achieve the prescribed levels of service, we will begin with our Point of Contact, Andrew McCleister at Protective Products. Mr. McCleister will be responsible for measuring as well as answering any fit issues.

Once measurements have been completed, they will be forwarded to your Customer Relations Manager, Beverly Slavick. Ms. Slavick will be responsible for sending all Acknowledgments and Order Confirmations.

Our Production Team will proceed with manufacturing the order. Upon completion, our Shipping Manager, Vince Pappalardo, will then package and prepare the order for shipping.



PROTECTIVE PRODUCTS

Experience

Protective Products has been successfully conducting business in Florida since 1993. Protective Products is committed to excellence in all they do. We will accomplish our mission through technological leadership, product research and development, responsible marketing, and commercial strategies that create and reshape markets. Protective Products believes in delivering timely and comprehensive service to its' customers; providing innovation in all aspects of technology and design; and maintaining a position of leadership that sets the industry standard for quality.

Juan Valle, our Production Manager has been with Protective Products since February 2010. Mr. Valle has over 44 years of experience in the apparel industry, including nine years in the soft body armor industry. From 2001 thru 2004, Mr. Valle served as the Production Manager for both Military and Commercial products for one of the largest producers of body armor in North America. Beginning in 2004, Juan managed a facility dedicated to strictly Military production where he managed the production of 20,000 – 25,000 vests per month.

Beverly Slavick will be the dedicated Customer Relations Manager throughout the City of Fort Lauderdale contract. Ms. Slavick has been with Protective Products since March 2008. Her responsibilities include order acknowledgement, order confirmation, order entry, and status on shipment of product.

Cory Provenzano joined the Protective Products team in April of 2003 as a Regional Manager and was responsible for developing Minnesota, Wisconsin, Illinois, Indiana, Michigan, and Ohio. While in this position, Mr. Provenzano secured contracts with the City of Chicago Police Department and the Illinois State Police.

In April of 2004, Cory was promoted to the position of National Sales Manager and was responsible for increasing sales in the law enforcement market and oversaw eight Regional Managers. Additional responsibilities included training of regional managers, product and ballistic demonstrations, and increasing the law enforcement dealer network.

In April of 2006, Mr. Provenzano was promoted to the position of Director of Dealer Network and Product Manager. In this role, he was responsible for increasing the law enforcement dealer sales throughout the United States and training regional managers while developing new products for the law enforcement community.



PROTECTIVE PRODUCTS

Experience

In October of 2008, Cory was promoted to the position of Director of Business Development and is currently responsible for ten Regional Managers, bid solicitations, product training, product presentations and demonstrations, and increasing the law enforcement dealer network. Mr. Provenzano is also responsible for accurately training our domestic network of Manufacturers Representatives, Territory Managers, and Dealers on the specific aspects of body armor sizing and fitting.

Andrew McCleister joined Protective Products in April of 2004. Since joining the Organization, Mr. McCleister has held the positions of West Coast Regional Manager, National Director of the Ford Ballistic Vehicle Armor Program, and currently holds the position of Vice President of Domestic Sales. During his time with Protective Products, Mr. McCleister has secured many long term armor contracts, some of his clients include: L.A.P.D., California Highway Patrol, Seattle P.D., Ford Motor Company and Chrysler. Recently, Mr. McCleister secured the contract to provide NAVSEA with marine vessel armor for multiple 35 meter patrol boats. His additional twenty years of previous sales and marketing experience include positions at GBC Inc., Corporate Express, and U.S.O.P.

Mike Slate, Director of Engineering and Research, has been with Protective Products for three years. Mr. Slate has been in the body armor industry for eight years. Along with our hard armor engineer, Jon Miller, our engineering group has a total of 38 years of armor design experience. We utilize this experience to design state of the art body armor systems that exceed NIJ standards while increasing performance and comfort for the officer. Our Research Department incorporates a ballistic range, equipped to meet all of the requirements of an NIJ Certified testing facility. Protective Products is capable of testing a full spectrum of projectiles from 22 to 30.06 caliber projectiles as well as Mil-Spec 2, 4, 16, 17 and 64 grain fragment simulating projectiles. This flexibility provides our engineering team the capability to test not only to the NIJ requirements but also Military fragmentation and International requirements.

PART VII - PROPOSAL PAGES – COST PROPOSAL

PRICING PAGE

ITEM	EST. QTY FOR TWO-YRS	DESCRIPTION	UNIT PRICE	TOTAL PRICE (UNIT PRICE X EST. QTY)
1.	<p>370/ FOR 2-YRS</p> <p>Year 1 Est. is 150</p> <p>Year 2 Est. is 220</p>	<p>NIJ06 Standard Level II Ballistic Vest package which includes the following minimum specification requirements:</p> <ol style="list-style-type: none"> 1. Front and Rear Ballistic Panels 2. Soft Trauma Plate 3. One (1) concealable vest carrier 4. One (1) Tactical outer Carrier with the following specifications: <ol style="list-style-type: none"> A) 4"x4" MOLLE System with Velcro closure B) Cordura material C) Drag handle D) Velcro with Buckle Closures to the side E) Belly Band System F) Pockets for Front and Rear Tactical Plates G) "POLICE" on Rear in removable Velcro patch H) 2.5" block letters, white or yellow I) Front Velcro panel 3"x10" with room for name Tape, with ½" block letters, Badge patch and "POLICE" in block letters on removable Velcro patch. J) Contractor shall provide name tape K) Contractor shall provide Police Velcro Patch, white or yellow L) Shall have Velcro adjustments at shoulders M) Right and Left Radio mike attachments N) Carrier shall be black in color O) Areal density weight of these ballistic panels shall be no greater than 0.90. <p>Manufacturer <u>Protective Products Enterprises</u></p> <p>Model/Style: <u>Python DX II + MOLLE LBV</u> (DXF II for females)</p>	<p><u>\$549.00</u></p> <p>*Note: We are including an additional concealable carrier in this package.</p>	<p><u>\$203,130.00</u></p>

		<p>OPTIONAL ITEMS: Please provide additional optional items costs that exceed the minimum requirements of the NIJ06 Standard Level II Ballistic Package as stated above. These items may/may not be awarded and are not included in cost calculation for evaluation scoring. Contractor may provide these additional optional items and costs on an additional pricing page, included in their proposal.</p> <p>NOTE: Contractors should also provide below (Item 2), the upgrade cost from a NIJ06 Standard Level II to NIJ06 Standard Level III Ballistic Package.</p>		
2.	<p>30/ FOR 2-YRS</p> <p>YR 1 Est. is 10</p> <p>YR 2 Est. is 20</p>	<p>NIJ06 Standard Level IIIA Ballistic Vest package upgrade (from Level II)</p> <p>* Areal density weight of these ballistic panels shall be no greater than 1.15.</p> <p>Manufacturer <u>Protective Products Enterprises</u></p> <p>Model/Style: <u>Python DX IIIA + MOLLE LBV</u> (DXF IIIA for females)</p>	<p>\$<u>649.00</u></p> <p>*Note: We are including an additional concealable carrier in this package.</p>	<p>\$<u>19,470.00</u></p>
		TOTAL (ITEMS 1 AND 2)	\$ _____	\$ <u>222,600.00</u>

Upgrade price from Level II to Level IIIA is \$100.00

PLEASE SEE NEXT PAGE FOR
PRICING ON OPTIONAL ITEMS



PROTECTIVE PRODUCTS

QUOTATION

Quote Date: January 18, 2011
Contact: Michael Walker

Customer Name: City of Fort Lauderdale
Address: 100 North Andrews Avenue, Suite 619
Fort Lauderdale, FL 33301

Phone Number: (954) 828-5677
Fax Number:
Email Address: mwalker@fortlauderdale.gov

Quantity	Item Number / Item Description	Unit Price	Line Total
1	6"x8" SPEED Plate, Triple Curve	\$79.00	\$79.00
1	7"x9" SPEED Plate, Triple Curve	\$89.00	\$89.00
1	10"x12" SPEED Plate, Triple Curve	\$129.00	\$129.00
1	5"x7" Female SPEED Plate, Single Curve	\$69.00	\$69.00
1	6"x8" Female SPEED Plate, Single Curve	\$79.00	\$79.00
1	M.C.S. / Bio-Guard TASER resistant liner	\$49.00	\$49.00
1	Tactical Pouches for MOLLE Load Bearing Vest	\$12.00	\$12.00
1	10"x12" 2518 Level III In-Conjunction Hard Armor Plate	\$189.00	\$189.00
1	10"x12" Triple Curve Ceramic Plate #2092	\$189.00	\$189.00
1	10"x12" Level III Stand Alone PE Plate	\$385.00	\$385.00
GRAND TOTAL:			\$1,269.00

Comments:

Delivery Time: 30 days ARO
Payment Terms: Net 30 Days
Freight Terms: FOB Destination
Validity Date: 90 Days
Quoted By: Cory Provenzano

Price Approved By: 

Thank you for allowing Protective Products to provide you with a quote. If you require further assistance, or have any additional questions, please contact us at:

1655 NW 136 Avenue, Sunrise, FL 33323
Telephone Number: 954-846-8222 800-509-9111
Fax Number: 954-846-0555
Website: www.body-armor.com Email: sales@body-armor.com



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
04/01/2010

PRODUCER Marsh USA Inc. PO Box 459010 Sunrise, FL 33345-9010 395033-PPH-casua-10-11	THIS CERTIFICATION IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.	
	INSURERS AFFORDING COVERAGE	NAIC #
INSURED Protective Products Holding Co. Protective Products Enterprises, Inc. 1649 Northwest 136th Avenue Sunrise, FL 33323	INSURER A: Twin City Fire Insurance Co	29459
	INSURER B: Hartford Fire Insurance Co	19682
	INSURER C: Commerce And Industry Ins Co	19410
	INSURER D:	
	INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR	INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS
A		GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR GENERAL AGGREGATE LIMIT APPLIES PER <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC	10CESOF1059	03/05/2010	03/05/2011	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES/(EA OCCURRENCE) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
B		AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	10UENJB9545	03/05/2010	03/05/2011	COMBINED SINGLE LIMIT (EA accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
		GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EA ACC \$ AGG \$
C		EXCESS / UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$ 10,000	BE1609026	03/05/2010	03/05/2011	EACH OCCURRENCE \$ 25,000,000 AGGREGATE \$ 25,000,000
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE Y/N OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under SPECIAL PROVISIONS below	10WEZJ2228	03/05/2010	03/05/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
		OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

CERTIFICATE HOLDER 	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE of Marsh USA Inc. Shari L. Frank
-------------------------------	---

Certificate of Registration



global assurance

This is to certify that the Quality Management System of:

Protective Products Enterprises

1649 NW 136th Avenue
Sunrise, FL 33323

applicable to:

The design and manufacture of body armor

has been assessed and approved by
National Quality Assurance, U.S.A., against the provisions of:

ISO 9001:2008

K M Beard

For and on behalf
of NQA, USA, Acton, MA 01720

Certificate Number: 12590

EAC Code: 15

First Issued: February 16, 2005

Valid Until: December 6, 2010

Reissued: April 14, 2010



Quality Manual



PROTECTIVE PRODUCTS
ENTERPRISES

1655 Northwest 136th Avenue
Sunrise, FL 33323



QM-01F Quality Manual

Introduction

Protective Products Enterprises, Inc. (PPE) recognizes its responsibilities as a manufacturer to comply in full with all contractual provisions and governing regulations. PPE's quality management system is a comprehensive program comprised of the company's best business practices to empower our work force and continually improve the system to meet our responsibilities and ensure our customer's are satisfied. Our program provides consistent quality products that meet and exceed our customer's requirements, applicable governing requirements, and is certified to the International Organization of Standard's ISO 9001:2008.

The purpose of this manual is to highlight our quality system internally and to our customers and other interested parties.

The quality control manager of PPE has been delegated the responsibility and authority for assuring full implementation of the complete quality management system, including control of the quality manual. This manual will be revised as necessary to reflect changes in quality requirements.

Chief Operating Officer: _____

A handwritten signature in black ink, appearing to be 'M. Smith', written over a horizontal line.



PROTECTIVE PRODUCTS
ENTERPRISES

QM-01F Quality Manual

About Us



PPE is one of the leading designers and manufacturers of state of the art concealable and tactical body armor. The company offers a broad line of high quality products at an outstanding value for the government, military and law enforcement communities throughout the world, including special purpose armor, ballistic plates, and helmets designed to protect and save lives.

Our commitment to customer service, coupled with a sincere dedication to product craftsmanship and superior quality, has not only become the cornerstone of PPE, it has also made us leaders in the body armor industry.

Thank you for choosing our armor to protect your most valuable asset... your life. At PPE, we do not take that responsibility lightly. We are committed to providing you with exceptional lifesaving products. We take great pride in exceeding industry standards as well as our customers' expectations.



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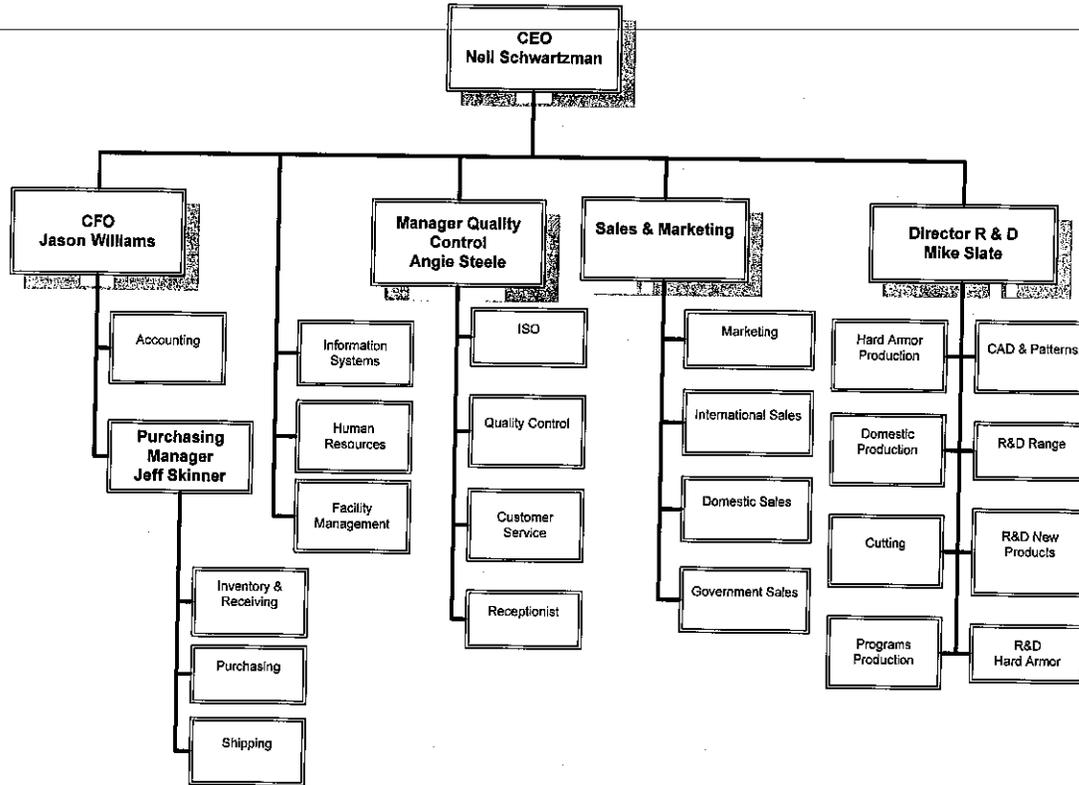
Quality Manual Distribution

The Quality Manual shall be distributed as follows:

The quality manual and all system documentation will be distributed and maintained electronically on the company server. All employees that may have an impact on quality, have access to this information through the computer network. PPE does not utilize a paper copy distribution system. The document control coordinator will maintain a paper copy of initial document releases and all subsequent revisions.



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March 2010



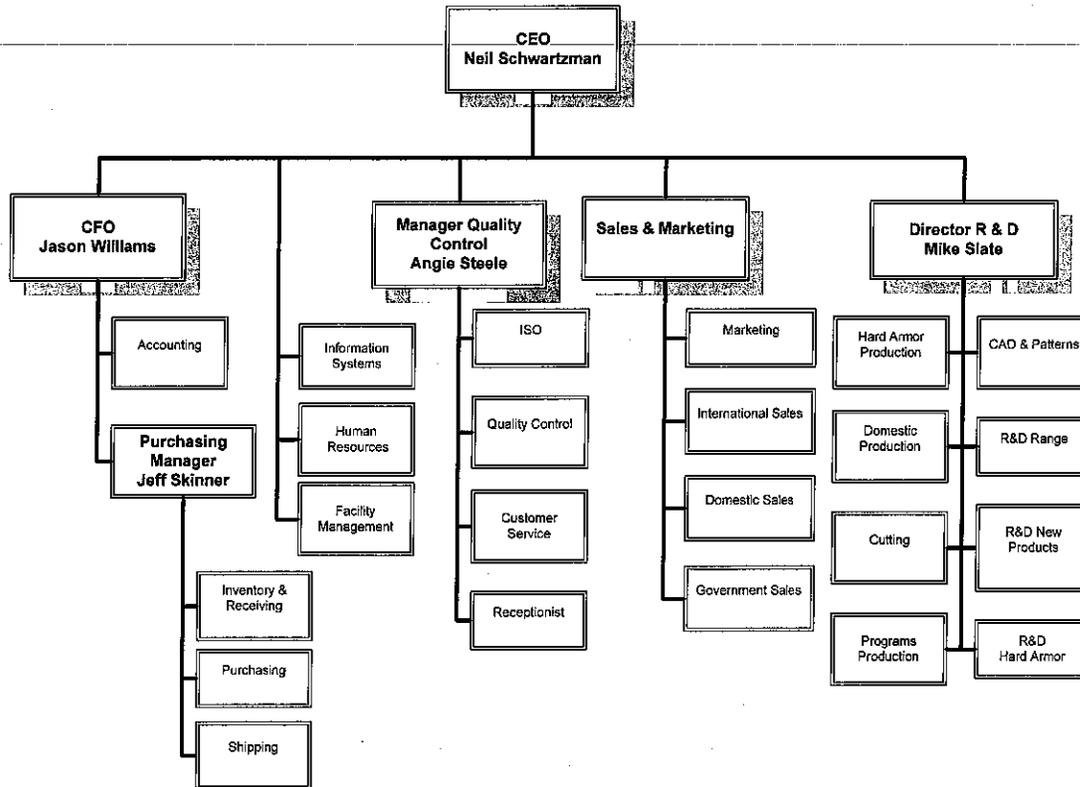
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Section 5: Management Responsibility



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Quality Manual

Section 1: Scope

1.1 General

The quality manual outlines the policies, procedures and requirements of the Quality Management System. The system is structured to comply with the conditions set forth in the International Standard ISO 9001:2008

1.2 Application

PPE does not take any exclusions from the ISO 9001 requirements.



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Section 2: Normative Reference

2.0 Quality Management System References

The following documents are used as references to maintain the Quality Management System compliance:

- ISO: 9000:2005, Quality Management Systems – Fundamentals and vocabulary.
- ISO: 9001:2008, Quality Management Systems – Requirements
- ISO: 9004:2009, Managing for the sustained success of an organization – A quality management approach



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Section 3: Definitions

3.0 Quality Management System Definitions

This section is for definitions unique to PPE.

- Customer owned property - Any type of instrumentation, accessories, manuals, or shipping containers that belong to a customer.
- Customer supplied product - Any type of service or material supplied to be utilized in the manufacture, modification or repair of customer-owned property.
- Product – The end item result of meeting all contract and/or order terms and conditions. (eg: manufactured goods, merchandise, etc.)
- Quality Records – Documentation of those activities wherein records of said activities must be maintained will be specified in the procedure or work instruction level documents, as applicable



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Section 4: General Requirements



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4.1 General requirements

PPE has established, documented and implemented a Quality Management System (QMS) in accordance with the requirements of ISO 9001:2008. The system is maintained and continually improved through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive action and management review.

To maintain the QMS PPE:

- Identifies the processes needed for the QMS and their application throughout the organization and documents
- Determines the sequence and interaction of the processes
- Determines criteria and methods needed to ensure that the operation and control of the processes are effective, and documented in quality plans, work instructions and the Measuring, Monitoring and Analysis Table
- Ensures the continuing availability of resources and information necessary to achieve planned results and continual improvement of the processes
- Measure, monitor, and control vendors/sub-contractors
- Monitor, measure and analyze the processes
- Identifies and implements actions necessary to achieve planned results and continual improvement of the processes

4.2 Documentation Requirements

4.2.1 General

The QMS documentation includes:

- A documented Quality Policy
- This Quality Manual
- Documented Procedures
- Documents identified as needed for the effective planning, operation and control of our processes, and
- Quality Records

4.2.2 Quality manual

This Quality Manual has been prepared to describe PPE QMS. The scope and permissible exclusions of the QMS are described in section one of this manual.



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- Promote awareness of customer requirements throughout the organization.
- Act as a liaison with external parties such as customers or auditors on matters relating to the QMS.

5.5.3 Internal communication

Processes are established for communication within the organization. Methods of communicating the effectiveness of the QMS include department and management meetings, management review, circulation of minutes of management review meetings, Internal Audit Closing meetings, and other routine business communication.

5.6 Management review

5.6.1 General

Management reviews the QMS at management review meetings. This review assesses the continuing QMS suitability, adequacy and effectiveness, identifying opportunities for improvement and needed changes. Records are maintained for each management review meeting.

5.6.2 Review input

Assessment of the QMS is based on a review of information inputs to management review. These inputs include the following:

- Results of audits
- Customer feedback
- Process performance and product conformity
- Company level quality data
- Status of preventive and corrective actions
- Follow-up actions from previous management reviews
- Planned changes that could affect the quality management system
- Recommendations for improvement

5.6.3 Review output

During these review meetings, management will identify appropriate actions to be taken regarding the following issues:

- Improvement of the effectiveness of the quality management system and its processes



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6.1 Provision of resources

PPE has implemented a Quality Management System that complies with the ISO 9001 2008 standard. This implementation was achieved with management commitment and with sufficient resources for the implementation. To effectively maintain and continually improve the system, management determines and provides necessary resources.

6.2 Human resources

6.2.1 General

To ensure competence of our personnel, job descriptions have been prepared identifying the qualifications required for each position that affects product quality. Qualifications include requirements for education, skills and experience. Appropriate qualifications, along with required training, provide the competence required for each position.

6.2.2 Competence, training and awareness

Qualifications are reviewed upon hire, when an employee changes positions or the requirements for a position change. Human resources maintain records of employee qualifications. If any differences between the employee's qualifications and the requirements for the job are found, training or other action is taken to provide the employee with the necessary competence for the job. The results are then evaluated to determine if they were effective. Training and evaluation are conducted according to the Training procedure. (P-622)

All employees are trained on the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.

6.3 Infrastructure

To meet quality objectives and product requirements PPE has determined the infrastructure needed (P-630). The infrastructure has been provided, and includes buildings, workspace, utilities, equipment, and supporting services. As new infrastructure requirements arise, they will be documented in quality plans. Existing infrastructure is maintained to ensure product conformity. Maintenance requirements are documented.

6.4 Work Environment

A work environment suitable for achieving product conformance is maintained. Requirements are determined during quality planning and documented in the quality plan. The work environment is managed for continuing suitability. Data



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from the quality system is evaluated to determine if the work environment is sufficient for achieving product conformance, or if preventive or corrective action related to the work environment is required.

Related Documents

Competence, Training and Awareness	P-622
Infrastructure	P-630



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Section 7: Product Realization



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7.1 Planning of product realization

Quality planning is required before new products or processes are implemented. The quality planning may take place during review and acceptance of a customer order, as a design project, or according to the Planning of Product Realization procedure (P-710). During this planning, management or assigned personnel identify:

- The quality objectives and requirements for the product
- Processes, documentation and resources required
- Verification, validation, monitoring, inspection and test requirements
- Criteria for product acceptance

The output of quality planning includes documented quality plans, processes, procedures and design outputs.

7.2 Customer-related processes

7.2.1 Determination of requirements related to the product

PPE determines customer requirements before acceptance of an order. Customer requirements include those:

- Requested by the customer
- Required delivery and post-delivery activities
- Not stated by the customer but necessary for specified use or known and intended use
- Statutory and regulatory requirements related to the product
- Additional requirements determined by PPE

Customer requirements are determined according to the Customer Related Processes Procedure. (P-720)

7.2.2 Review of requirements related to the product

PPE has a process in place for the review of requirements related to the product (P-720). The review is conducted before the order is accepted. The process ensures that:

- Product requirements are defined



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- Contract or order requirements differing from those previously expressed are resolved
- PPE has the ability to meet the defined requirements
- Records are maintained showing the results of the review and any actions arising from the review
- Where a customer does not provide a documented statement of requirement, the customer requirements are confirmed before acceptance
- When product requirements are changed, PPE communicates changes to relevant personnel and amends relevant documents

7.2.3 Customer communication

PPE has implemented an effective procedure (P-720) for communicating with customers in relation to:

- Product Information
- Enquiries, contracts and order handling, including amendments
- Customer Feedback, including customer complaints

7.3 Design and Development

7.3.1 Design and development planning

The design and development procedure (P-730) outlines the process for controlling the design and development process. The R&D Department plans design and development according to this procedure. The design plan includes:

- Design and development stages
- Required design reviews
- Verification and validation methods appropriate to each design and development stage
- Responsibilities and authorities for design and development
- Identification of the technical interfaces required for the project
- Updating of the design plan as the project progresses



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7.3.2 Design and development inputs

Inputs relating to product requirements are determined and documented according to the Design and Development procedure (P-730). All inputs are reviewed for adequacy and completeness, and to resolve any ambiguous inputs. Inputs include:

- Functional and performance requirements
- Applicable statutory and regulatory requirements
- Where applicable, information derived from previous similar designs
- Other requirements essential for design and development

7.3.3 Design and development outputs

Outputs of design and development are documented according to the Design and Development Procedure (P-730). They are documented in a format that enables verification against the inputs, and are approved prior to release. Outputs:

- Meet the input requirements
- Provide appropriate information for purchasing, production and for service provision
- Contain or reference product acceptance criteria
- Specify the characteristics of the product that are essential for its safe and proper use.

7.3.4 Design and development review

The design plan specifies suitable stages of the project to conduct design and development review. Reviews take place according to the design and development procedure; results of design review are recorded. Design reviews:

- Evaluate the results of design and development activities and determine if they fulfill requirements
- Identify any problems and propose necessary actions
- Include representatives of functions concerned with the design and development stage being reviewed



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7.3.5 Design and development verification

Design verification is planned and performed to ensure that the design and development outputs have satisfied the design and development input requirements. Records of the results of the verification and any necessary actions are maintained according to the Design and Development procedure (P-730).

7.3.6 Design and development validation

Design and development validation is performed according to the design plan to ensure that the resulting product is capable of fulfilling the requirements for the specified or known intended use or application. Validation is completed prior to delivery whenever practicable. Records of the validation activities are maintained according to the design and development procedure.

7.3.7 Control of design and development changes

The design and development procedure defines a process for identifying, recording, verifying, validating and approving design changes. The review of design and development changes includes an evaluation of the effect of the changes on constituent parts and delivered product. Records are maintained to show the results of the review and any necessary actions identified during the review.

7.4 Purchasing

7.4.1 Purchasing process

A documented procedure (P-740) is followed to ensure that purchased product and services conform to the specified purchase requirements. The procedure outlines the extent of control required for suppliers. Suppliers, including sub-contractors, are evaluated and selected based on their ability to supply product and services in accordance with requirements as outlined in the procedure. Criteria for selection, evaluation and re-evaluation are documented in the procedure. Records of the evaluation and any necessary actions are maintained as quality records.

7.4.2 Purchasing information

Purchasing information describes the product and/or service to be purchased, including where appropriate:

- Requirements for approval of product, processes and equipment
- Requirements for qualification of personnel



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- Quality management system requirements

The purchasing documents are reviewed to ensure the adequacy of requirements before orders are placed with the supplier.

7.4.3 Verification of purchased product and services

The Purchasing procedure (P-740) describes the process used to verify that purchased product and services meet specified purchase requirements. If PPE or the customer will perform verification at the supplier's premises, the verification arrangements and method of product release are documented in the purchasing information.

All materials being used for fabrication are to be inspected and tested, where specified, prior to their incorporation into the final products. Ballistic materials shall be tested, as specified, visually for production shortcomings, and ballistically tested. Please note, Quality Control will ensure that lots of ballistic material delivered to the factory shall be accompanied by their manufacturer's quality Certificate of Conformance.

If raw material is found to be defective/non-compliant, the material is segregated under lock & key in our quarantined area until it is returned to the manufacturer.

7.5 Production and Service Provision

7.5.1 Control of production and service provision

PPE plans and carries out production and service provision under controlled conditions according to documented procedure (P-750). Controlled conditions include, as applicable:

- The availability of information that describes the characteristics of the product
- The availability of work instructions
- The use of suitable equipment
- The availability and use of monitoring and measuring devices
- The implementation of monitoring and measurement
- The implementation of release, delivery and post-delivery activities

7.5.2 Validation of processes for production and service provision

PPE validates any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement.



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This includes any processes where deficiencies become apparent only after the product is in use or the service has been delivered. Validation demonstrates the ability of these processes to achieve planned results.

PPE has documented the process for validation including:

- Defined criteria for review and approval of the processes
- Approval of equipment and qualification of personnel
- Use of specific methods and procedures
- Requirements for records
- Revalidation

7.5.3 Identification and traceability

PPE identifies the product throughout product realization according to the Identification and Traceability procedure (P-753). Product is identified with respect to monitoring and measurement requirements.

PPE controls and records the unique identification of the product wherever traceability is a specified requirement.

7.5.4 Customer property

PPE exercises care with customer property while it is under the organization's control or being used. A procedure (P-754) outlines the identification, verification, protection and safeguarding of customer property provided for use. If any customer property is lost, damaged or otherwise found to be unsuitable for use, this is reported to the customer and records maintained.

7.5.5 Preservation of product

PPE preserves the conformity of product during internal processing and delivery to the intended destination per procedure (P-755). This preservation includes identification, handling, packaging, storage and protection. Preservation also applies to the constituent parts of a product.

7.6 Control of monitoring and measuring devices

PPE has determined the monitoring and measurement to be undertaken and the monitoring and measuring devices needed to provide evidence of conformity of product to determined requirements. A documented procedure (P-760) outlines the process used to ensure that monitoring and measurement to be carried out



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are carried out in a manner that is consistent with the monitoring and measurement requirements.

Where necessary to ensure valid results, measuring equipment is:

- Protected from damage and deterioration during handling, maintenance and storage.
- Visually inspected periodically to ensure no damage has occurred and devices are legible.

In addition, Quality Control assesses and records the validity of the previous measuring results when the equipment is found not to conform to requirements. PPE takes appropriate action on the equipment and any product affected. Records of the results of calibration and verification are maintained.

When used in the monitoring and measurement of specified requirements, the ability of computer software to satisfy the intended application is confirmed. This shall be undertaken prior to initial use and reconfirmed as necessary.

Related Documents

Planning of Product Realization Processes	P-710
Customer Related Processes	P-720
Design and Development	P-730
Purchasing	P-740
Control of Production and Service Provision	P-750
Identification and Traceability	P-753
Customer Property	P-754
Preservation of Product	P-755
Control of Monitoring and Measuring Devices	P-760



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nonconformities and their causes. Follow-up activities include the verification of the actions taken and the reporting of verification results.

8.2.3 Monitoring and measurement of processes

PPE applies suitable methods for monitoring and, where applicable, measurement of the quality management system processes. These methods demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, correction and corrective action is taken, as appropriate, to ensure conformity of the product. The process for identifying and carrying out the required monitoring and measuring of processes is documented in the Monitoring, Measuring and Analysis of Product Realization Processes (P-824) and Management Responsibility procedures (P-500).

8.2.4 Monitoring and measurement of product

PPE monitors and measures the characteristics of the product to verify that product requirements are fulfilled. This is carried out at appropriate stages of the product realization process identified in Monitoring, Measuring and Analysis of Product Realization Processes (P-824).

Evidence of conformity with the acceptance criteria is maintained. Records indicate the person authorizing release of product. Product release and service delivery does not proceed until all the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority, and where applicable by the customer.

8.3 Control of Nonconforming Product

PPE ensures that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming product are defined in the Control of Nonconforming Product procedure (P-830).

8.4 Analysis of Data

PPE determines, collects and analyses appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the quality management system can be made. The process for determining, collecting and analyzing this data is defined in the Management Responsibility procedure (P-500) and in procedure (P-840) Statistical Techniques. Appropriate data includes data generated as a result of monitoring and measurement and from other relevant sources.

The analysis of data provides information relating to

- Customer satisfaction



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- Conformance to product requirements
- Characteristics and trends of processes and products including opportunities for preventive action
- Suppliers

8.4.1 Root cause analysis

PPE has determined that the use of root cause analysis is necessary in order to fully understand the reasons that cause non-conformities and has developed procedure P-841, Root Cause Analysis, to ensure that proper analysis of non-conformities is performed. The Operations Manager is responsible for ensuring that RCA is performed in a timely and consistent manner and appropriate records are maintained.

8.5 Improvement

8.5.1 Continual improvement

PPE continually improves the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

8.5.2 Corrective action

PPE takes action to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions are appropriate to the effects of the nonconformities encountered.

A documented procedure (P-852) defines requirements for

- Reviewing nonconformities (including customer complaints)
- Determining the causes of nonconformities
- Evaluating the need for action to ensure that nonconformities do not recur
- Determining and implementing action needed
- Records of the results of action taken (see 4.2.4)
- Reviewing corrective action taken



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8.5.3 Preventive action

PPE determines action to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions are appropriate to the effects of the potential problems.

A documented procedure (P-853) defines requirements for:

- Determining potential nonconformities and their causes
- Evaluating the need for action to prevent occurrence of nonconformities
- Determining and implementing action needed
- Records of results of action taken
- Reviewing preventive action taken

Related Documents

Management Responsibility	P-500
Customer Related Processes	P-720
Monitoring, Measuring and Analysis of Customer Satisfaction	P-821
Internal Audits	P-822
Monitoring & Measuring of Product & Realization Processes	P-824
Control of Nonconforming Product	P-830
Statistical Techniques	P-840
Root Cause Analysis	P-841
Corrective Action	P-852
Preventive Action	P-853