

COMPLIANCE TESTING PROGRAM

August 26, 2024

NIJ CTP Product Conformity Assessment System
Document 101-07: Ballistic-Resistant Body Armor Scheme
Version 1.0

Summary of Changes: This revision (1.0) establishes the National Institute of Justice (NIJ) Compliance Testing Program (CTP) Scheme for Ballistic-Resistant Body Armor in accordance with NIJ Standard 0101.07. Revisions in this document include:

- 1) This is a complete revision of the predecessor document (606.2.1, Version 1.1, dated July 6, 2020) and conforms to the new numbering convention for NIJ CTP Product Conformity Assessment Documents.
 - a. The General Requirements Document, previously identified as 606.1, is now 100-1. Subordinate scheme documents, previously identified with a 606.x.x numbering convention, are now numbered and identified according to their respective NIJ Standards.
 - b. The subordinate scheme document associated with the NIJ CTP for NIJ Standard 0101.07, Ballistic Resistant Body Armor, is now identified as Document 101-07. In Document 101-07, the Initial Type Testing (ITT) (formerly 606.2.1) and Follow-up Inspection and Testing (FIT) (formerly 606.2.2) Schemes have been consolidated into a single scheme document for clarity.
 - c. This document is specific to the NIJ CTP's evaluation of models tested to the requirements of NIJ Standard 0101.07. It does not supersede the requirements of either NIJ CTP Scheme Documents 606.2.1 (ITT) or 606.2.2 (FIT) for models tested to the requirements of NIJ Standard 0101.06, which is a separate CTP operated by the NIJ CTP. As of the date of publication of this document, 606.2.1 has been archived, as ITT to 0101.06 has ended; 606.2.2 has been comprehensively revised to align with the revisions to 100-1 and 101-07 and has been renamed 101-06-FIT.
- 2) Section 2, Normative References, has been updated with current versions of referenced standards and consolidation of standards previously listed in 606.2.1 and 606.2.2.
- 3) Section 3, Definitions, has been expanded to include many common terms used in association with the operation of the NIJ CTP, to align with the current suite of ASTM Standards used in conjunction with this specific CTP, and to consolidate those previously listed in 606.2.1 and 606.2.2.
- 4) Sections 4–7 have been retitled, reorganized, and expanded for greater detail and clarity.
 - a. Former Section 5.3, Test Item Requirements for Soft Panel Designs, has been deleted, as it is addressed by Section 7.1.1.1 of NIJ Standard 0101.07.
 - b. Former Section 5.4, Soft Body Armor Model Incorporating Two Panel Designs, has been deleted, as it is addressed by Section 7.2 of NIJ Standard 0101.07.
 - c. Former Section 5.6, Test Item Requirements for Scaled Type III Designs, and Section 6.5, Testing Scaled Armor Perforation and Backface Signature, have been deleted, as they are addressed by Section 12.2.5 of NIJ Standard 0101.07.

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Overview of Changes to this Document (continued):

- 5) The following previously issued NIJ CTP Administrative Clarifications have been incorporated into this document:
 - a. 2009:06, Key Features of Armor Construction (see Section 4.4)
 - b. 2013:01, Manufacturing Locations and Use of Subcontracted Manufacturers (see Section 4.3)
 - c. 2013:02, Production Ballistic Panel Labeling (see Sections 4.2 and 9.3, and Appendix A)
 - d. 2013:03, Limited Coverage Ballistic-Resistant Body Armor (see Section 5.3)
 - e. 2015:04, Stab- or Ballistic-Resistant Body Armor Designs That Potentially Contain Hazardous Materials (see Section 4.5 and Appendix B)
 - f. 2018:01, Potentially Hazardous Materials Contained in Ballistic-Resistant or Stab-Resistant Body Armor (see Section 4.5 and Appendix B)
 - g. 2018:03, Minimum Size Requirement for Limited Coverage Armor (see Section 5.3)
 - h. 2020:01, Listed Company Production Labels (see Appendix A, Item 1)
 - i. 2021:01, Changes to Export Administration Regulations (EAR) (see Section 4.6 and Appendix D)
 - j. 2022:01, Ballistic Panel Cover Substitution (see Section 4.7)

- 6) Former Section 8, Surveillance, has been retitled to NIJ Standard 0101.07 Compliant Products List, incorporating former Section 8.1; new Section 9, The NIJ Mark of Conformity (“NIJ Mark”) incorporates former Sections 8.2–8.3; the remaining former sections (8.4–8.8) have been incorporated into Section 11, Follow-up Inspection and Testing (FIT), or Product Surveillance, which also incorporates basic concepts of the prior FIT Scheme (606.2.2). The FIT operational processes between 101-07 (Section 11) and 101-06-FIT have largely been harmonized, but specific test requirements differ as they align with the respective NIJ Standard.

- 7) Former Section 9, Revisions to Requirements, has been retitled and revised and is now Section 14, Changes and Revisions to Program Requirements.

- 8) Former Section 10, Revision History, is now Section 15.

- 9) The following new sections and appendices have been added:
 - a. Section 10, Indicating Conformity of Production Items
 - b. Section 12, Product Certification Termination
 - c. Section 13, Complaints and Appeals
 - d. Appendix B, Guidance to NIJ CTP Participants Regarding Potentially Hazardous Materials Contained in Ballistic-Resistant Body Armor
 - e. Appendix C, Ballistic Panel Cover Substitution
 - f. Appendix D, Resources/Links Related to U.S. Import/Export Requirements
 - g. Appendix E, Summary of Test Items Required for Follow-up Inspection and Testing (FIT)

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NIJ CTP Product Conformity Assessment System

Document 101-07: Ballistic-Resistant Body Armor Scheme

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Introduction

This product conformity assessment scheme forms a part of the National Institute of Justice (NIJ) Compliance Testing Program (CTP) Product Conformity Assessment System. The top-level system document (NIJ CTP Product Conformity Assessment System, Document ID 100-1) contains additional information and requirements that are applicable to this subordinate scheme. The requirements, procedures, and activities of the NIJ CTP described in this scheme document constitute NIJ's implementation of NIJ Standard 0101.07, *Ballistic Resistance of Body Armor*. The conformity assessment requirements contained in this scheme are intended to clarify or add to, not diminish, those contained in both NIJ Standard 0101.07 and NIJ CTP Product Conformity Assessment System, Document 100-1.

Participation in this scheme requires the transfer of body armor between the Participant, the NIJ CTP, and the test laboratory. Participants are expected to comply with all applicable federal, state, and local laws. Refer to Appendix D of this document for further discussion and information on this topic.

The official specification limits contained in this scheme shall be in International System of Units (SI). Any other units provided in parenthesis following the SI units are for convenience only. If any difference exists because of conversion or rounding, the SI units have precedence.

This document and the associated schemes follow International Organization for Standardization (ISO) conventions regarding the following verbal forms:

- *Shall* indicates a requirement.
- *Should* indicates a recommendation.
- *May* indicates a permission.
- *Can* indicates a possibility or a capability.

Information marked as Note provides guidelines for understanding or clarifying the associated paragraph.

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1. Scope

1.1 General Requirements

- 1.1.1. This scheme describes the specific conformity assessment requirements of the NIJ CTP for ballistic-resistant body armor models tested in accordance with NIJ Standard 0101.07 to be listed on [NIJ's Compliant Products List \(CPL\)](#).

1.2 Roles and Responsibilities

- 1.2.1. The NIJ CTP is responsible for the overall management and performance of the activities described in this scheme, as well as the maintenance and updating of this scheme document (see Section 14) on a regular basis and/or as CTP requirements and operations evolve.
- 1.2.2. The ballistic testing of samples conducted through the activities described in this scheme will be performed by [NIJ-approved test laboratories](#) (see NIJ CTP Document 100-1, Section 4.3) according to the requirements of this scheme.
- 1.2.3. NIJ CTP Participants are responsible for submitting the required information (described in Section 4) to the NIJ CTP and complying with all terms and conditions of any agreements required of Participants to participate in, or to maintain good standing with, the NIJ CTP.

1.3. Applicable Product Categories

- 1.3.1. Only the following categories of ballistic-resistant body armor are within the scope of this document:
- (1) soft body armor typically made up of layers of textile-based materials shaped into armor panels that are intended to provide either full torso (front, back, and sides) or limited torso (front and back) coverage (typically, NIJ Ballistic Protection Level HG1 or HG2, as defined in NIJ Standard 0123.00),
 - (2) *in conjunction with armor* (Section 3.15) that consists of a single armor panel or in conjunction plate (Section 3.16; typically, NIJ Ballistic Protection Level RF1, RF2, or RF3 as defined in NIJ Standard 0123.00) that is intended to be layered with a specific stand-alone soft body armor (1.3.1.(1) above) to provide increased protection to the torso, and
 - (3) hard armor that consists of a single armor plate that is intended to provide stand-alone protection to the torso.
- 1.3.2. Only armor models designated as NIJ Ballistic Protection Levels HG1, HG2, RF1, RF2, and RF3, as described in NIJ Standard 0123.00, and tested to the requirements of NIJ Standard 0101.07 in accordance with the requirements of this scheme, are within the scope of this scheme.
- 1.3.3. Armor accessories (see Section 3.3) are not within the scope of this scheme.

1.4. Hierarchy of Requirements and Supporting Documents

- 1.4.1. Where requirements contained in this document may differ with requirements contained in NIJ Standard 0101.07, this document shall take precedence.
- 1.4.2. The requirements in *NIJ CTP Product Conformity Assessment System – General Requirements* (Document 100-1) apply unless otherwise indicated.

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2. Normative References

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- 2.1. ASTM E3005-24. *Standard Terminology for Body Armor*.
- 2.2. 22 CFR Part 120. *International Traffic in Arms Regulations*.
- 2.3. ILAC-P15:05/2020. *Application of ISO/IEC 17020:2012 for the Accreditation of Inspection Bodies*.
- 2.4. ISO 9000:2015. *Quality management systems — Fundamentals and vocabulary*.
- 2.5. ISO 10393:2013. *Consumer product recall — Guidelines for suppliers*.
- 2.6. ISO/IEC 17020:2012. *Conformity assessment — Requirements for the operation of various types of bodies performing inspection*.
- 2.7. ISO/IEC 17021:2015. *Conformity assessment — Requirements for bodies providing audit and certification of management systems*.
- 2.8. ISO/IEC 17025:2017. *General requirements for the competence of testing and calibration laboratories*.
- 2.9. ISO/IEC 17065. *Conformity assessment — Requirements for bodies certifying products, processes and services*.
- 2.10. ISO/IEC 17067:2013. *Conformity assessment — Fundamentals of product certification and guidelines for product certification schemes*.
- 2.11. NIJ Standard 0101.07. *Ballistic Resistance of Body Armor*.
- 2.12. NIJ Standard 0123.00. *Specification for NIJ Ballistic Protection Levels and Associated Test Threats*.

3. Terms and Definitions

The terms defined here supplement those provided in ASTM 3005, NIJ Standard 0101.07, and the NIJ CTP Product Conformity Assessment System (Document 100-1).

3.1. **accessory**, *n*

A body armor component that is detachable or movable from the body armor and is intended to provide an extended area of coverage protection against threats that may include ballistic threats, stabbing, fragmentation, blunt impact, or a combination of threats (ASTM E3005).

Note: Accessories are typically attachments to tactical body armor providing protection to areas not covered by the vest, such as the shoulders, upper arms, neck, sides, pelvis, and groin.

3.2. **Applicant**, *n*

Organization or legal entity requesting to participate in the NIJ CTP through a formal application process established by the NIJ CTP (NIJ CTP Scheme Document 100-1, Section 3.1).

3.3. **armor accessory**, *n*

Synonymous with *accessory*.

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3.4. armor panel, *n*

A component of soft body armor consisting of protective materials that are typically enclosed in a panel cover (ASTM E3005).

3.5. armor plate, *n*

Synonymous with *hard armor*.

3.6. body armor, *n*

An item of personal protective equipment intended to protect the wearer from threats that may include ballistic threats, stabbing, fragmentation, or blunt impact (ASTM E3005).

3.7. Certification Body (CB), *n*

Third-party conformity assessment body operating certification schemes (ISO/IEC 17065, 3.12).

3.8. construction, *n*

Physical characteristics of an actual product sample.

Note: Regarding ballistic-resistant body armor, construction includes but is not limited to key features, layup of materials, actual shape, and actual size.

3.9. coverage, *n*

The area of protection provided by a *unique design* (Section 3.32) of ballistic-resistant body armor. Also see *full torso coverage* (Section 3.13) and *limited coverage* (Section 3.20).

3.10. design, *n*

Documented plan that defines the physical characteristics of a product. Also see *key feature* (Section 3.19) and *unique design* (Section 3.32)

3.11. Field Inspector, *n*

A staff member of an *Inspection Body* (Section 3.18) who performs inspections at *manufacturing locations* (Section 3.23).

3.12. flexible body armor, *n*

Body armor constructed of pliable, textile-based materials such that the complete system is capable of being flexed. Such systems are typically vests or jackets that provide a greater coverage area than rigid plate armor. Generally, these armors provide protection against handgun threats (NIJ Standard 0123.00, Levels HG1 and HG2).

Note: For the purposes of this scheme, the term “*flexible*” is synonymous with the term “*soft*.”

3.13. full torso coverage, *n*

Coverage that includes, as a minimum, protection for the front, back, and sides of the upper torso.

3.14. hard armor, *n*

An item of personal protective equipment that is constructed of rigid materials and is intended to protect the wearer from threats that may include ballistic threats, stabbing, fragmentation, or blunt impact, or combinations thereof; synonymous with *armor plate* (Section 3.5) and *plate* (ASTM 3005).

3.15. in conjunction with armor, *n*

Soft or hard armor that is designed to provide a specific level of ballistic protection only when layered with a specified model(s) of body armor (ASTM E3005).

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3.16. in conjunction plate, *n*

An insert that is designed to provide increased ballistic or stab protection only when used with a particular model of flexible armor vest or jacket (NIJ Standard 0101.07, 3.1.20).

3.17. Initial Product Inspection, *n*

A component of the NIJ CTP's Follow-up Inspection and Testing (FIT) program, performed after a NIJ Notice of Compliance is issued and at the beginning of production of a NIJ-certified model, where the NIJ-authorized *Inspection Body* (Section 3.18) randomly samples products from a designated *manufacturing location* (Section 3.23) that are assessed to verify compliance with program requirements.

3.18. Inspection Body, *n*

An organization that performs an examination of a product design, product, service, process, or manufacturing facility and a determination of their conformity with specific requirements or, based on professional judgment or general requirements.

3.19. key feature, *n*

A specific design element that, when combined with other design elements, comprises a unique design.

Note: Key features of body armor include but are not limited to the type, source, number, weave count, sequence, or orientation of layers of materials of construction; slits, slots, cuts, notches, seams, darts, overlaps, or folds; stitching pattern, placement, type, and length; additional panels or similar features; intended shapes or sizes; and any processes (e.g., adhesive or thermal bonding, coating) necessary to achieve the desired result.

3.20. limited coverage, *adj*

Coverage that is less than *full torso coverage* (Section 3.13). A *limited coverage* shape is considered any shape that is not intended to provide full torso coverage for the end user regardless of whether it is designed to be worn externally (tactical) or concealed (flexible) under clothing.

3.21. listed company, *n*

Company name or brand under which a product is labeled, listed, and sold.

3.22. NIJ CTP listed, *adj*

Equipment found compliant by the NIJ CTP with an applicable NIJ CTP scheme and subsequently listed on a NIJ CTP-compliant product list.

3.23. manufacturing location, *n*

Physical location(s) of the production facility where final construction (e.g., where the materials listed on the NIJ CTP build sheet are assembled and sealed, in the manner described on the build sheet) takes place, the NIJ Mark of Conformity ("NIJ Mark") is applied, and surveillance inspections are performed.

3.24. nonplanar armor, *n*

Body armor having features that would prevent the test item from making full contact with a flat surface; examples include female body armor with bust cups and curved rigid plates (ASTM 3005).

3.25. panel, *n*

Synonymous with *armor panel*.

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3.26. panel cover, *n*

A covering, typically nonremovable, that encloses the protective materials and protects them from environmental factors, such as moisture, ultraviolet light, debris, and dust (ASTM 3005).

3.27. planar armor, *n*

Body armor that allows the test item to make full contact with a flat surface.

3.28. plate, *n*

Synonymous with *hard armor*.

3.29. scaled armor, *n*

A type of hard armor design consisting of or containing imbricated (i.e., overlapping) tiles or discs.

3.30. scope change, *v*

A change in *construction*, *design*, or *key features* of a *unique design* that results in a material difference from a previously submitted and approved model application.

Note: A scope change may either be allowable (Section 4.7.2) or unallowable.

3.31. soft armor, *n*

An item of personal protective equipment constructed of pliable/flexible materials intended to protect the wearer from threats that may include ballistic threats, stabbing, fragmentation, or blunt impact (ASTM 3005).

3.32. unique design, *n*

The characteristics of a specific set of *test items* (see NIJ CTP Document 100-1, Section 3.24), documented by a Participant and identified by a *model designation* (see NIJ CTP Document 100-1, Section 3.16), which make that specific set of test items singularly identifiable as an individual model.

4. Model Application

4.1. Model Application Submission Method

4.1.1. The NIJ CTP has established the Testing Information Management System (TIMS), which is the online system that all Participants shall use to submit applications and manage the individual models they submit in accordance with this scheme throughout their lifecycle in the NIJ CTP process, including surveillance testing (Follow-up Inspection and Testing, or FIT; see Section 11).

4.2. Required Information for Model Applications

4.2.1. Participants must provide the following information with their ballistic-resistant body armor model applications submitted in TIMS:

4.2.1.1. Scope of requested certification, to include the following:

- (1) applicable standard and associated scheme,
- (2) structure (planar, nonplanar, soft, hard, in conjunction with [ICW], front opening),
- (3) NIJ Ballistic Protection Level (NIJ Standard 0123.00),
- (4) shot-to-edge distances for each threat,
- (5) curve (flat, single, multiple),
- (6) proposed shots per panel, and

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(7) proposed number of panels.

4.2.1.2. Declared gender;

Note: The Participant must self-declare a gender (male, female, or neutral). However, there are no required differences in construction, testing, or inspection.

4.2.1.3. The period of time the Participant warrants the armor model’s ballistic-resistant performance for the originally declared NIJ Ballistic Protection Level (NIJ Standard 0123.00);

Note: The Participant must self-declare a ballistic performance warranty period. However, there are no tests or inspections to validate the warranty period.

4.2.1.4. Drawing of the proposed label containing all the information identified in Appendix A for each listee;

4.2.1.5. Complete description of the construction including materials and assembly;

4.2.1.6. Technical data sheet for each component used in the model;

4.2.1.7. Safety data sheet (SDS) for each key or hazardous material used in the model;

Note: This includes materials that may be hazardous in their “as received,” “during testing,” or “post testing” conditions (Refer to Appendix B for more detail on this topic.).

4.2.1.8. Manufacturing location(s) where the model will be produced (see Section 4.3);

4.2.1.9. Diagrams of all shapes that include key features (model design aspects that vary in relation to size shall be clearly defined in order to fully document the entire scope or range of a model) See Section 4.4 for more details;

4.2.1.10. NIJ-approved test laboratory selected by the Applicant for initial type testing;

4.2.1.11. Diagrams or description of acceptable tolerances for each feature (e.g., stitching, darting, coating/layer thicknesses), specific to each NIJ template size (NIJ-C-1 – NIJ-C-5) and/or production armor sizing; and

Note: “Tolerances” refers to the acceptable range of variation from the original measurement (which defines the accuracy and repeatability of the manufacturing process).

4.2.1.12. Description of materials or features contained in the proposed model armor not fully addressed by NIJ 0101.07.

Note: In conjunction armor consists of a dependent panel that must be used with a stand-alone soft armor panel. It may be considered either a soft or hard panel with regard to required information concerning its design.

Note: The NIJ CTP may require additional administrative forms or agreements to be completed before accepting the application.

4.3. Declaration of Manufacturing Location(s)

4.3.1. Applicants/Participants are required to notify the NIJ CTP of all active *manufacturing locations* (Section 3.23) and where NIJ-compliant body armor is being assembled (Section 4.2.1.8). This

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includes both locations operated by the Applicant/Participant and locations operated by a subcontractor or listee.

- 4.3.2. All manufacturing locations are subject to surveillance during FIT activities (see Section 11). This includes *initial product inspections* (Section 3.17) whenever a manufacturing location begins production of a model.
- 4.3.3. NIJ CTP Participants are fully responsible for enforcing compliance with these agreements by all employees and subcontractors involved in the manufacture of the Participant's listed body armor model(s) at all manufacturing locations. This includes but is not limited to responsibility for all manufacturing locations regarding:
 - (1) Adherence to the applicable construction and assembly described in current documents provided to the NIJ CTP by the Applicant.
 - (2) The compliance of model(s) with program requirements including on-site access to manufacturing locations for surveillance purposes.
 - (3) Following the manufacturing processes used for samples provided for initial determination testing (this includes quality assurance and applicable verification of purchased materials).
 - (4) Maintaining records associated with quality and tracking of individual armors and their component materials.
 - (5) Notifications of end users.
 - (6) Recalls when necessary.

4.4. Declaration of Key Features of Armor Construction

4.4.1. General

- 4.4.1.1. All *key features* (Section 3.19) of armor construction shall be documented in the model application package. Significant variations to key features will be considered as a different and distinct model. This includes variations to "Gender-Neutral Armor" to accommodate body differences.
- 4.4.1.2. Documentation shall include each feature, the size range, extent for production armor, and any other details that could impact performance.

4.4.2. Features Accommodating the Female Form

- 4.4.2.1. Armor models that use key features, such as notches, along the outer perimeter of the front armor panel to accommodate the female form will be tested as nonplanar armor (see NIJ Standard-0101.07, Sections 9.3.2.1 and 9.3.3.1.1) with additional guidance by the CTP. Specifically, for notches or similar features, the Applicant-defined shot-to-edge distance for each caliber shall be referenced from the edge of the panel with the notch closed. (See Figure A [page 13] for more detail.)

4.4.3. Changes to key features

- 4.4.3.1. Any future changes to key features shall be communicated to and approved by the NIJ CTP prior to implementation in the design or fielding of any models utilizing these changes.
- 4.4.3.2. If the NIJ CTP determines that the proposed change in key features constitutes a *variation* (see NIJ CTP Scheme Document 100-1, Section 3.27) that results in a *unique design* (NIJ CTP

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Scheme Document 100-1, Section 3.32), the Participant will have to submit that unique design under a new model designation for testing to determine that model's compliance with the NIJ Standard.

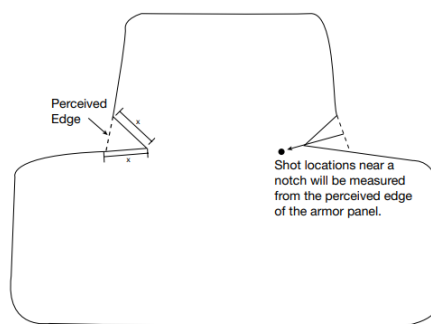


Figure A: Female Armor with Notches

4.5. Declaration of Atypical or Potentially Hazardous Materials

- 4.5.1. NIJ CTP Participants shall review the guidance contained in Appendix B regarding NIJ's requirements for declaring materials or coatings that are atypical and/or may be potentially hazardous. Based on the guidance in Appendix B, NIJ CTP Participants shall adhere to the following processes:
 - 4.5.1.1. Participants that submit ballistic-resistant or stab-resistant body armor models to the NIJ CTP for evaluation shall declare in writing, **prior to the submission of test items to the NIJ CTP or NIJ-approved test laboratory**, whether the armor contains materials that:
 - (1) are atypical, or
 - (2) have been identified as hazardous by Occupational Safety and Health Administration (OSHA), or
 - (3) include carbon nanotubes (CNTs) or other nanomaterials.
 - 4.5.2. When materials that are atypical or hazardous are identified, the Participant shall demonstrate to the satisfaction of the NIJ CTP that the materials submitted are safe to handle in their "as received," "during testing," and "post-testing" conditions. The Participant shall also provide the NIJ CTP with the appropriate SDS for each atypical or hazardous material.
 - 4.5.2.1. The NIJ CTP cannot anticipate what types of atypical or hazardous materials may be submitted and the associated risks they may pose to CTP operations or stakeholders. Therefore, any reviews and determinations made by the NIJ CTP will be on a case-by-case basis.
 - 4.5.2.2. The primary focus of the NIJ CTP is to evaluate the ballistic performance of an armor model. Any review or determination made by the NIJ CTP as part of this section does not constitute

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an assessment or validation of the safety, suitability, and/or stability of any of the materials or components used in a specific model.

- 4.5.3. If a Participant is unable to demonstrate materials are safe to handle in an office environment, the Participant shall provide the NIJ CTP with safe handling instructions, which the NIJ CTP must determine to be adequate. In some cases, the Participant may be required to provide the NIJ CTP, to the NIJ CTP's satisfaction, with the capability to safely handle the materials in question. This may include an appropriate location or facility separate and apart from those typically utilized by the NIJ CTP.
- 4.5.4. It also the responsibility of the Participant to notify the NIJ-approved test laboratory that has been selected to conduct the test that the armor contains materials that are atypical or have been identified as hazardous by OSHA and to provide the laboratory with the appropriate SDS for each atypical or hazardous material, as well as any safe handling instructions provided to the NIJ CTP per Sections 4.5.2 and 4.5.3 above.
- 4.5.5. Participants are encouraged to contact the NIJ CTP with any questions they may have regarding the submission of armor **prior** to submitting a model application to the NIJ CTP or test samples to a NIJ-approved laboratory.

4.6. Import/Export Control Requirements

- 4.6.1. As stated in Section 4.4.3 of *NIJ CTP Product Conformity Assessment System – General Requirements (Document 100-1)*, all NIJ CTP Participants, NIJ-approved test laboratories, and NIJ-approved Inspection Bodies must comply with all applicable U.S. Laws, regulations, and government controls, including [U.S. export controls](#) and/or [International Traffic in Arms Regulations](#) (ITAR) regulations, and will promptly supply all information needed to comply with those controls. (See Appendix D for further discussion and information.) Additionally, Participants agree they will not use an intermediary to circumvent U.S. export controls or ITAR regulations.
- 4.6.2. When the NIJ CTP is made aware of changes to U.S. Government Agency regulations regarding Import and Export Controls, applicable NIJ policies and procedures will be modified as necessary to ensure compliance with those controls. Changes will be communicated to NIJ CTP Participants via announcements at the following link: <https://cjttec.org/submit-products/>
- 4.6.3. Actions that the NIJ CTP may take to comply with Import and Export Controls and regulations include but are not limited to the following:
 - (1) Placing a hold on all equipment submission from the countries identified as being restricted.
 - (2) Placing a hold on all NIJ CTP FIT activities for Participants from the countries identified as being restricted.
 - (3) Temporarily moving all active CPL-listed ballistic armor body armor models from program Participants that are from the countries identified as being restricted to the inactive list.

Note: Models that are on the inactive list are not subject to FIT. Armor models that do not participate in FIT are not eligible to use the NIJ Certification Mark for armor models produced during the time they are in an “Inactive” status.

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4.7. Retesting of Noncompliant Models/Designs (Scope Change)

4.7.1. Generally, a body armor design previously determined by testing to be noncompliant shall not be reevaluated unless:

- (1) a design (Section 3.9) change has been implemented that impacts the body armor's performance (and submitted under a new model test ID), or
- (2) the new request includes an allowable change in scope (see Section 4.7.2).

4.7.2. Scope Change

4.7.2.1. A NIJ CTP Participant may request a change in scope for a model currently listed on the NIJ CPL to substitute a ballistic armor *panel cover* (Section 3.26) material used on that model as long as:

- (1) armor panels constructed identically to the originally tested, approved, and CPL-listed model, with the proposed new ballistic panel cover material, demonstrates equivalent performance to the approved model with the original panel cover material, and
- (2) the manufacturing facility where the armor model is produced is currently accredited to BA9000.

Participants should refer to Appendix C for further details and test requirements to accomplish this scope change.

5. Selection of Test Items (Sampling)

5.1. NIJ CTP Test Plan

5.1.1. The NIJ CTP shall prepare a test plan for the Applicant and test laboratory that meets the requirements of NIJ Standard 0101.07 and this scheme and includes at least the following:

- (1) NIJ CTP test identification number or project number,
- (2) manufacturer reference identification or tentative model identification,
- (3) NIJ Ballistic Protection Level (as defined in NIJ Standard 0123.00),
- (4) number of test items,
- (5) test item sizes, and
- (6) special instructions (if any) for the test laboratory (such as specific shot locations).

5.2. Test Item General Requirements

5.2.1. Except for size as dictated by NIJ Standard 0101.07 and design aspects directly related to size or optional neck openings, the panels or plates of a single compliance test group shall contain no variation in construction between either each other or the Applicant's documentation.

5.2.2. The term *armor* may refer to either **two** panels (two test items) when discussing soft armor or **one** plate (one test item) when discussing hard armor or a combination of these when discussing in conjunction armor. To facilitate clarity, this scheme shall use the term *test item* instead of armor when discussing individual specimens from a compliance test group.

5.2.3. Refer to Sections 7 (soft armor) and 10 (hard armor) of NIJ Standard 0101.07 for test requirements including the size and quantities of test items provided to the test laboratory and their purpose.

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5.3. Test Item Requirements for Limited Coverage Ballistic-Resistant Designs

- 5.3.1. As defined in Section 3.20, *Limited Coverage Armor* is considered any shape that is not intended to provide full torso coverage for the end user regardless of whether it is designed to be worn externally (tactical) or concealed (flexible) under clothing. The NIJ CTP considers *full torso coverage* (Section 3.13) to be, at a minimum, protection for the front, back, and sides of the upper torso.
- 5.3.2. The NIJ CTP recognizes the need within the law enforcement and public safety communities for limited coverage ballistic-resistant body armor. Limited Coverage Armor has a significantly reduced perimeter to allow for additional concealability in covert operations or in situations where personnel (i.e., first responders, emergency medical technicians firefighters, etc.) may not routinely wear armor or where risk is low.
- 5.3.3. NIJ CTP Participants that would like to offer the option of a limited coverage shape for a new model must:
 - (1) Submit a diagram of the shape (identified) that includes the sizes in which it will be offered to the NIJ CTP with all other shapes offered for that model when applying for a test ID number.
 - (2) Construct the ballistic panel identical to the samples supplied for initial type testing.
 - (3) Include on the ballistic panel label for that shape a statement that identifies the armor as “*Limited Coverage: This armor provides limited coverage for the torso against ballistic threats*” in font that is twice as large as the rest of the type of the label (except the existing warning statements) (see Appendix A, Production Armor Labeling and Marking Requirements [Item #18]).
 - (4) A representative sample label bearing the “Limited Coverage” statement must be provided to the CTP.
- 5.3.4. Size Requirements for Limited Coverage Armor: If an Applicant produces a Limited Coverage Armor shape smaller than the area of the NIJ-C-1 template identified in NIJ Standard 0101.07 Appendix E, then the smallest production-sized Limited Coverage Armor shape that will be authorized by the NIJ CTP is 7 inches x 9 inches or an area of 63 square inches (Figure B, page 17). This minimum size is established to provide additional confidence that Limited Coverage Armor shapes smaller than the NIJ-C-1 template size provide ballistic performance comparable to the full torso version of the armor model on which the Limited Coverage Armor is based.
- 5.3.5. It is important to note that the intent of Limited Coverage Armor remains the same as previously stated. Limited Coverage Armor that displays the NIJ Certification Mark is intended to be worn on the torso but with a reduced outer perimeter to offer better concealability in covert situations. Panels that are designed to protect the end user’s extremities or to provide additional protection to existing torso-worn armor are considered accessories and are outside the scope of the NIJ CTP. **These types of accessories are not authorized to display the NIJ Mark.**
- 5.3.6. Limited coverage panels used as a component of an ICW system (plates combined with Limited Coverage Armor panels) are not considered to meet this requirement given the need to retain concealability. As defined in Section 10.1.2 of NIJ Standard 0101.07, ICW plates should be paired with *full torso coverage* armor panels.

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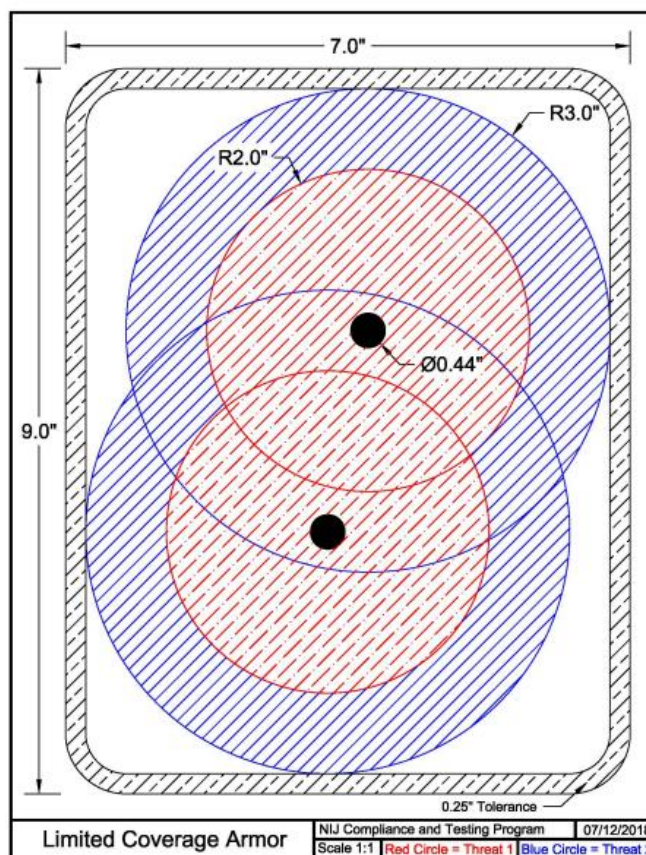


Figure B: Diagram of Smallest Allowable Size for Limited Coverage Armor

6. Initial Type Testing, or ITT (Determination)

6.1. General Testing Requirements

- 6.1.1. The Participant must supply consistently constructed test items to the selected NIJ-approved test laboratory in accordance with the NIJ CTP test plan. If test items are determined to be constructed inconsistently during the performance of testing, or during pre- or post-test examination, the test shall be declared invalid.

6.2. NIJ-Approved Laboratory Requirements

6.2.1. General Laboratory Requirements

6.2.1.1. Test Item Identification and Documentation

- 6.2.1.1.1. The laboratory is responsible for test item identification throughout the life of the test item in the laboratory. The laboratory shall use a method that will not be destroyed or become illegible during testing.

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6.2.1.1.2. The test laboratory shall record if the test items are tested in a planar or nonplanar configuration to indicate if additional clay was used to build up the surface behind the test item. For details on clay applique requirements, refer to NIJ Standard 0101.07, Appendix G for nonplanar soft armor and Section 12.4.4 for nonplanar hard armor.

6.2.1.2. Test Initiation and Termination

6.2.1.2.1. Testing in accordance with this scheme shall not be initiated by the laboratory until the NIJ CTP has issued a Test ID Number for the ITT Test in TIMS and authorized the laboratory to proceed with testing.

6.2.1.2.2. The laboratory shall review the NIJ CTP Test Plan (see Section 5.1) and direct any questions, concerns, or identified or perceived discrepancies regarding the test plan to the NIJ CTP for resolution prior to initiating testing.

6.2.1.2.3. ITT Testing in accordance with this scheme may be terminated at any time by the Participant. All decisions to terminate must be reported by the test laboratory to the NIJ CTP. The CTR must be provided to the NIJ CTP and include an explanation for the termination. If the test includes a failure, the test items provided to the NIJ CTP should include those that experienced the failure(s).

6.2.2. Ammunition Auditing (NIJ Standard 0123.00, Appendix A)

6.2.2.1. To complete the ammunition auditing described in Appendix A of NIJ Standard 0123.00, NIJ-approved laboratories may do one of the following:

- (1) Obtain and maintain accreditation to that standard and conduct activities described in Appendix A in house.
- (2) Subcontract activities described in Appendix A to another NIJ-approved test laboratory accredited to NIJ Standard 0123.00 (See Section 4.3.1.7 of NIJ CTP Scheme Document 100-1).
- (3) Subcontract activities described in Appendix A to another third-party laboratory accredited to ASTM E18 by an ILAC signatory that can perform traceable mass measurements and dimensional inspection in accordance with the mass and dimension ranges and tolerances described in NIJ Standard 0123.00.

6.2.2.2. Alternatively, NIJ-approved laboratories may obtain ammunition from a supplier that can provide documentation and traceability of ammunition auditing described in Appendix A of NIJ Standard 0123.00 by one of the following:

- (1) An NIJ-approved laboratory accredited to NIJ Standard 0123.00 to conduct activities described in Appendix A in house.
- (2) Another third-party laboratory accredited to ASTM E18 by an ILAC signatory that can perform traceable mass measurements and dimensional inspection in accordance with the mass and dimension ranges and tolerances described in NIJ Standard 0123.00.

6.3. NIJ CTP ITT Test Report

6.3.1. All testing, conditioning, and other reports or documentation related to test items evaluated for ITT in accordance with this scheme shall be:

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- (1) performed by NIJ-Approved Test Laboratories (within their scope of approval),
- (2) completed according to the test laboratory's accredited ISO/IEC 17025 management system,
- (3) compliant with NIJ Standard 0101.07, as well as additional requirements documented in NIJ CTP Scheme Documents 100-1 and 101-07,
- (4) completed using the current NIJ CTP-provided CTR template, reflecting the test laboratory's accreditation status, include the NIJ CTP test identification number, and be fully compliant with both National Voluntary Laboratory Accreditation Program (NIST Handbook 150) and ISO/IEC 17025 requirements (**Note:** The NIJ-approved laboratory shall not make any modifications to the format or calculations contained in the NIJ CTP-provided CTR template without the express prior authorization of the NIJ CTP.),
- (5) performed in compliance with additional instructions provided in the NIJ CTP test plan, and
- (6) include an approved signatory authorization.

6.3.2. Test Laboratory Post-ITT Evaluation and Test Sample Disposition

- 6.3.2.1. After testing is completed, the test laboratory shall verify that all test items conform to the description recorded on the test report.
- 6.3.2.2. Following testing, the test laboratory shall supply either four soft armor panels or two hard plates to the NIJ CTP. The test laboratory should provide the NIJ CTP with a tested item and an untested spare. If an untested spare cannot be provided, the laboratory shall document the reason why in the CTR.

6.3.3. Delivery of ITT Test Reports and Documentation

- 6.3.3.1. The NIJ CTP has established TIMS, which is the online system to be used by all NIJ-Approved Test Laboratories to submit CTRs and other supporting documentation to the NIJ CTP, as well as manage the individual models they conduct official ITT in accordance with this scheme; additionally, throughout these models' lifecycle in the NIJ CTP process, including surveillance testing (FIT; see Section 11). NIJ-approved laboratories shall transmit all ITT test reports, data, and associated documentation (e.g., photographs) via TIMS unless otherwise directed by the NIJ CTP.
- 6.3.3.2. All ITT test reports, data, and associated documentation shall be transmitted to the NIJ CTP via TIMS within 5 business days of completion of testing.
- 6.3.2.3. When test results from a previous test report are combined with new test results into a single test report, the final test report shall clearly identify which test data were transcribed and identify their origin.

6.4. NIJ CTP Post-Test Inspection

- 6.4.1. The NIJ CTP shall inspect the test report for any inconsistencies concerning test data.
- 6.4.2. The NIJ CTP shall visually inspect all test items received from the test laboratory to verify consistency of construction and accuracy (i.e., no *variation* [NIJ CTP Conformity Assessment System document 100-1, Section 3.27]) with both the Participant's and the test laboratory's description of the construction.
- 6.4.3. The NIJ CTP shall perform a final review of the Participant's application forms.

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6.5. NIJ CTP Compliance Recommendation

6.5.1. The results of NIJ CTP’s evaluation activities shall be documented in a compliance recommendation for NIJ’s review that includes:

6.5.1.1. A cover letter that provides the following information:

- (1) applicant,
- (2) product and applicable standard,
- (3) model,
- (4) list of materials (documents) inspected by the NIJ CTP that support the recommendation,
- (5) list of documents included with the cover letter,
- (6) noteworthy information related to recommendation, and
- (7) signatures of at least two NIJ CTP staff members who agree with the recommendation.

6.5.1.2. NIJ CTP Body Armor Build Sheets;

6.5.1.3. Test report;

6.5.1.4. Label samples;

6.5.1.5. Additional construction information provided by the Applicant;

6.5.1.5. Material technical data sheets (specifications);

6.5.1.6. Safety data sheets; and

6.5.1.7. Description of sizes and shapes included in the scope of this recommendation.

6.5.2. The compliance recommendation shall be provided to NIJ to review and reference when making the certification decision.

6.5.3. Test items inspected by the NIJ CTP, at the NIJ CTP’s sole discretion, may be returned to the Participant at the Participant’s expense, held by the NIJ CTP for future reference (e.g., ongoing product surveillance), or disposed of when the NIJ CTP determines they are no longer needed.

7. Review and Certification Decision

7.1. A NIJ staff member shall carry out both the review and the certification decision. Following a review of the applicable evidence of compliance, NIJ may certify that a product complies with specified requirements.

Note: See NIJ CTP Document 100-1, Section 4.2.1.4 for further information on NIJ’s certification decision process.

7.2. The NIJ CTP shall communicate an affirmative decision to the Applicant using a NIJ Notice of Compliance (NIJ CTP Document 100-1, Section 6.2) that includes the following information:

- (1) NIJ Ballistic Protection Level,
- (2) shot-to-edge distance (threat 1),
- (3) shot-to-edge distance (threat 2), and
- (4) maximum and minimum sizes tested.

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Note: This list supplements the requirements identified in Section 6.2.2 of the *NIJ CTP Product Conformity Assessment System – General Requirements* (Document 100-1).

8. NIJ Standard 0101.07 Compliant Products List (CPL)

8.1. General Requirements

- 8.1.1. The NIJ CTP shall publish a CPL for this scheme that lists the model designations of products that have received an NIJ Notice of Compliance and continue to meet the applicable program requirements. In addition to the general information required by the NIJ CTP Product Conformity Assessment System (Document 100-1, Section 7), the CPL for this scheme shall also include the following:
 - (1) NIJ Ballistic Protection Level (NIJ Standard 0123.00),
 - (2) if the armor is designed to fit the male (planar) or female (nonplanar) torso,
 - (3) single or multi-curve for armor plates, and
 - (4) period of time the Applicant warrants the armor model's ballistic performance for the originally declared NIJ Ballistic Protection Level.
- 8.1.2. The CPL for this product scheme shall be published online at [NIJ.gov](https://www.nij.gov) and [cjttec.org](https://www.cjttec.org). NIJ CTP staff shall update the CPL within 3 business days of the issuance of a NIJ Notice of Compliance for a specific model.
- 8.1.3. The NIJ CTP shall provide the Bureau of Justice Assistance's [Patrick Leahy Bulletproof Vest Partnership \(BVP\) Program](#) with weekly updates of the current listing of models that are compliant with this scheme.

9. The NIJ Mark of Conformity (“NIJ Mark”)

9.1. Authorization to Use the NIJ Mark

- 9.1.1. As described in NIJ CTP Document 100-1, Section 8, the NIJ Mark shall serve as the Applicant's attestation of conformity for ballistic-resistant body armor tested through this scheme.
- 9.1.2. Authorization to apply and reference the NIJ Mark can only be granted by both successful completion of testing a product through the NIJ CTP in accordance with this and any applicable subordinate scheme and the receipt of an NIJ Notice of Compliance that contains written authorization to apply the NIJ Mark to a specific model of ballistic-resistant body armor.

9.2. Conditions of Use of the NIJ Mark

- 9.2.1. NIJ CTP Participants authorized to use the NIJ Mark as described in Section 9.1 of this scheme shall adhere to the requirements described in NIJ CTP Document 100-1, Section 8.5 regarding use of the NIJ Mark on product labels.
- 9.2.2. Specific to this scheme, in addition to the requirements noted in 9.2.1 above, the NIJ Mark shall also comply with the following:

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- 9.2.2.1. Black on a white background;
- 9.2.2.2. Overall size 1 inch in diameter;
- 9.2.2.3. Inner circle 0.75 inches in diameter; and
- 9.2.2.4. Text “U.S. DEPARTMENT OF JUSTICE”, “OFFICE OF JUSTICE PROGRAMS,” and “Listed Model” shall use Helvetica Bold Condensed 6.5-point font.
- 9.2.3. The NIJ CTP shall have an agreement in place with NIJ CTP Participants regulating the use of the NIJ Mark prior to the Participant receiving authorization from NIJ.

9.3. Production Item Labeling

- 9.3.1. Every ballistic-resistant body armor panel or plate compliant with the surveillance program contained in this scheme and produced for sale and/or use by criminal justice agencies shall have a label permanently attached to the wear face of the panel using a labeling system that has been approved by the NIJ CTP as being compliant with the requirements contained in Appendix A of this scheme. This production item label is different from the test item label described in Appendix F of NIJ Standard 0101.07.
- 9.3.2. The label may be positioned in a location where it is not visible when the armor is worn, but it shall be easy to locate and easily readable when the armor is removed.
- 9.3.3. The Participant shall provide the NIJ CTP with a physical copy of a production label that complies with the requirements detailed in Appendix A.

10. Indicating Conformity of Production Items

- 10.1. NIJ CTP Participants that manufacture and sell products identified as being in compliance with this scheme shall also comply with the requirements described in NIJ CTP Document 100-1, Section 9, Indicating Conformity of Production Items.
- 10.2. NIJ has determined that the use of the NIJ Mark as described in Section 9 of this scheme document is the appropriate method to indicate conformity of production items for this specific scheme. NIJ CTP Participants shall **not** use a Supplier’s Declaration of Conformity described in NIJ CTP Document 100-1, Section 9.3, ICW products determined to be compliant with this scheme.

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11. Follow-Up Inspection and Testing, or FIT (Product Surveillance) for Ballistic-Resistant Body Armor – NIJ Standard 0101.07

11.1. General Overview

- 11.1.1. As described in NIJ CTP Document 100-1, Section 10, the goal of the NIJ CTP is to provide criminal justice practitioners with confidence that the products they use or the protective equipment they wear daily meet minimum performance requirements and perform as expected. To give practitioners additional confidence in the actual products they use, the NIJ CTP has implemented surveillance of manufacturers through FIT activities.
- 11.1.2. FIT consists of an inspection of the Participant’s manufacturing facilities and quality management system, as well as ballistic testing of production armor manufactured at the facility.
- 11.1.2.1. As described in further detail in this subordinate scheme document, inspectors from an accredited Inspection Body visit the manufacturing facility and retrieve a small number of production armors to be used as test items. Those armors are tested at an NIJ-approved laboratory.
- 11.1.2.2. An armor model is determined to meet NIJ CTP program requirements if no ballistic failures (i.e., complete penetrations) occur during testing, there are no construction variations when compared to the ITT documentation and archived test items for that model. and a post-test review by the NIJ CTP of the manufacturer’s build sheets and the tested samples demonstrates that the armor is constructed identically.
- 11.1.2.3. In the event of a single ballistic test failure or an identified construction variation, the NIJ CTP has established processes for the Participant to address the nonconformity (See Section 11.8.1.7.5.3). The NIJ CTP will issue an Advisory Notice for the model.
- 11.1.2.4. If the processes described in Section 11.8.1.7.5.3 do not sufficiently address the nonconformity, or if multiple ballistic failures occur, the surveillance test may be closed as a surveillance testing failure and NIJ may issue a NIJ Safety Notice for the model and permanently move the model to the inactive list on the NIJ CPL.

11.2. Scope

- 11.2.1. This scheme describes the specific conformity assessment requirements of the NIJ CTP for ongoing product surveillance (FIT) for ballistic-resistant body armor models that:
- (1) are classified as NIJ Ballistic Protection Level HG1, HG2, RF1, RF2, or RF3, as described in NIJ Standard 0123.00,
 - (2) have been tested to the requirements of NIJ Standard 0101.07, in accordance with the NIJ CTP Ballistic-Resistant Body Armor Inspection Scheme (NIJ CTP Product Conformity Assessment System, Document ID 101-07),
 - (3) have been issued a NIJ Notice of Compliance (Section 7.2), and
 - (4) are currently listed as an “Active” model on NIJ’s CPL (see Section 7.2.1.3.1 of NIJ CTP Scheme Document 100-1, General Requirements).

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11.2.2. Hierarchy of Requirements and Supporting Documents

11.2.2.1. These requirements supplement the general requirements of ISO/IEC 17020:2012 and define minimum requirements for bodies performing inspections in support of the NIJ CTP's surveillance function.

11.3. Roles and Responsibilities

11.3.1. The NIJ CTP is responsible for the overall management and performance of the surveillance activities described in this scheme.

11.3.1.1. Inspections shall be requested by either the NIJ CTP or the Participant. All inspections requested by the Participant (typically, initial product inspections) shall be approved by the NIJ CTP before commencing, and the NIJ CTP shall assign the laboratory to perform testing for the test items collected during the inspection.

11.3.2. For this specific scheme, the NIJ CTP has elected to designate a qualified third-party *Inspection Body* (See NIJ CTP Document 100-1, Section 4.5) to perform the on-site inspections, as well as documentation and sample collection, at manufacturing facilities as described in this scheme.

11.3.3. The ballistic testing of samples collected by the NIJ CTP-designated *Inspection Body* through the activities described in this scheme will be performed by *NIJ-approved test laboratories* (see Section 6.2) according to this scheme (see Section 11.8).

11.3.3.1. The NIJ CTP shall designate which NIJ-approved test laboratory will perform the surveillance test.

11.3.3.2. The NIJ CTP shall rotate among NIJ laboratories for the testing component of FIT so that armor models are tested at multiple laboratories while listed on the CPL.

11.3.4. NIJ CTP Participants are responsible for all costs related to this scheme, including supplying samples, shipping, inspection, and testing. Participants are also responsible for coordinating FITs with the Inspection Body by communicating when production of specific eligible armor models will take place and accommodating inspectors from the Inspection Body during times of production. Also see NIJ CTP Scheme Document 100-1, Section 10.3.

11.4. General Requirements for Inspection Bodies

11.4.1. The Inspection Body's clients for this scheme shall be Participants in the NIJ CTP conformity assessment program.

11.4.2. All inspection and test reports related to this scheme shall be provided by the Inspection Body to the NIJ CTP (See Section 11.5.1.e).

11.4.3. For the purposes of surveillance testing performed in accordance with this scheme, any reference to the "NIJ Mark" is a reference to the NIJ Certification Mark, as described in NIJ CTP Document 100-1, Section 8, and Section 9 of this subordinate scheme document.

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11.4.4. Compliance with this scheme alone does not confer approval from the NIJ CTP to perform inspections on its behalf. Inspection Bodies must also be designated as a NIJ CTP-Approved Inspection Body.

11.4.5. International Traffic in Arms Regulations and Export Administration Regulation

11.4.5.1. The Inspection Body shall comply with the requirements of 22 Code of Federal Regulations (CFR) Part 120, ITAR and Export Administration Regulation (EAR) to include compliance with any other government agencies as required.

11.4.5.2. The Inspection Body shall have documented policies for complying with ITAR and EAR requirements applicable to ballistic body armor and any associated technical data. The Inspection Body's policies should:

- (1) permit permanent imports of ballistic body armor and associated technical information,
- (2) prohibit exports of ballistic body armor and associated technical information, and
- (3) prohibit all non-U.S. persons from having access to ballistic body armor and associated technical information.

11.5. Administrative, Management, and Organizational Requirements for Inspection Bodies

11.5.1. Resource and Reporting Requirements

11.5.1.1. Personnel

11.5.1.1.1. Inspection Body staff members who perform inspections at manufacturing facilities (hereafter known as *Field Inspector*) shall have had training covering the following:

- (1) the NIJ Ballistic Protection Levels and Ballistic Test Threats (Section 4 of NIJ Standard 0123.00),
- (2) the NIJ Mark (as discussed in NIJ CTP Document 100-1, Section 8), and
- (3) general terminology contained in the following standards/documents:
 - ASTM 3005
 - NIJ Standard 0101.07
 - NIJ Standard 0123.00
 - NIJ CTP Product Conformity Assessment System, Document ID 100-1: General Requirements, and
 - NIJ CTP Product Conformity Assessment System, Document ID 101-07: NIJ CTP Ballistic-Resistant Body Armor Scheme

11.5.1.1.2. Field Inspectors who also inspect an NIJ CTP Participant's management systems shall be competent to inspect management systems.

11.5.1.1.3. Inspection Body staff members who review test reports shall, in addition to the requirements for Field Inspectors, also be competent to inspect test reports for compliance with both ISO/IEC 17025 and the test methods described in Sections 6, 9, and 11 of NIJ Standard-0101.07.

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11.5.1.2. Facilities and Equipment

11.5.1.2.1. The Inspection Body shall maintain an office in the United States where all field inspection reports and test reports are received and processed.

11.5.1.3. Subcontracting

11.5.1.3.1. For surveillance testing associated with this scheme, the Inspection Body shall only use test laboratories that are NIJ approved to perform testing to NIJ Standard 0101.07.

11.5.1.3.2. Other than test laboratories as described above, no other subcontracting of work covered by this scheme shall occur without express written permission from the NIJ CTP.

11.5.1.3.3. The Inspection Body shall require the test laboratory to complete Phase 1 Soft Armor (see Section 11.8.2), Hard Armor (see Section 11.8.4), and In Conjunction With (ICW, see Section 11.8.5) testing within 30 days. The test laboratory shall also be required to complete Phase 2 Soft Armor (see Section 11.8.3) testing within 10 days.

11.5.1.3.4. The Inspection Body shall review all surveillance test reports to ensure they comply with both ISO/IEC 17025 and this scheme prior to making payment to the test laboratory.

11.5.1.4. Inspection Records

11.5.1.4.1. The Field Inspector's original record of inspection and evidence of an Applicant's compliance shall be maintained and made available to the Scheme Owner on request.

11.5.1.4.2. The inspection report shall be internally traceable to the authorizing personnel who reviewed and approved both the surveillance test report and the Field Inspector's documentation.

11.5.1.5. Inspection Reports

11.5.1.5.1. The work carried out by the Inspection Body shall be covered by a retrievable inspection report.

11.5.1.5.2. The inspection report shall include the following:

- (1) results of field inspection and testing,
- (2) model, serial number, lot number, and date of manufacture for each ballistic panel inspected and tested,
- (3) a photograph of the ballistic panel label (from one representative sample),
- (4) applicant quality management documentation if applicable,
- (5) test laboratory where samples were tested,
- (6) both signature and printed name of authorizing personnel,
- (7) copy of test laboratory's ISO/IEC 17025-compliant surveillance test report, and
- (8) the following elements from Annex B, ISO/IEC 17020:2012: a, b, c, e, h, i, j, k, and m.

11.5.1.5.3. Reports shall clearly state *"The NIJ Compliant Product List and the associated NIJ Notices located at www.cjttec.org or www.nij.gov should be consulted to determine an armor model's current compliance status with the NIJ Compliance Testing Program."*

11.5.1.5.4. If the inspection included the Participant's quality management system, the report shall indicate the results.

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11.5.1.5.5. The complete report shall be provided to the NIJ CTP.

- (1) The NIJ-authorized Inspection Body shall use TIMS to submit reports and other documentation related to surveillance testing activities detailed in this scheme document.
- (2) For reference, the mailing address of the NIJ CTP/Scheme Owner is:
NIJ Compliance Testing Program
P.O. Box 12194
3040 E. Cornwallis Rd.
Hermann Building, Room 216
Research Triangle Park, NC 27709-2194

11.5.1.5.6. An alternate report modified to comply with ITAR and EAR requirements may be provided to Participants located outside of the United States. A complete report may be provided to Participants located within the United States.

11.5.1.5.7. If an amended report is created, all recipients provided an initial report by the Inspection Body shall be notified and the amended report made available.

11.5.2. FIT Cost Structure and Billing

11.5.2.1. The structure used to calculate costs charged to Participants for inspections performed under this scheme during a given time period shall apply the same flat rates and/or hourly rates to all Participants equally and shall be published or made available on request.

11.5.2.2. Costs charged to the Participant may vary from inspection to inspection based on any combination of the following reasons:

- (1) number of models inspected,
- (2) amount of time necessary to perform the inspection,
- (3) time spent for the Inspection Body personnel to travel to the inspection location, or
- (4) cost of transportation, lodging, and meals needed by Inspection Body personnel to perform an inspection.

11.5.2.3. In general, when developing cost schedules for travel associated with surveillance inspection services, Inspection Bodies should adhere to the current published [Federal Travel Regulations \(FTR\)](#). Some key requirements of the FTR are provided below for reference:

- (1) Costs charged for Inspection Body staff to travel by privately owned vehicle shall be limited to the mileage reimbursement rates published by the U.S. General Services Administration (GSA) in effect at the time of the travel.
- (2) Costs charged for lodging, meals, and incidental expenses shall be limited to the total maximum per diem rates published by GSA in effect at the time of the travel. On travel days, the maximum per diem rates for meals shall be reduced to 75 percent of the published rate.
- (3) The place of lodging on the evening of travel shall be considered the location for determining the maximum per diem rate of costs. On the return home day, the per diem will be based on the place of lodging from the previous day. For 1-day trips where no lodging is incurred, the per diem rate will be for the place of business.

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- (4) Costs charged for flights shall be limited to the lowest nonrefundable coach class meeting inspection requirements available at the time the ticket is purchased.
- (5) Business class or equivalent airfare costs for international flights of 8 hours or more are allowable. Flight time is determined by the official airline schedules. Flight legs separated by an overnight hotel stay may not be added together for the purpose of meeting the 8-hour requirement. Eight hours of flying time must be accumulated before or after an overnight stay.

11.5.2.4. Test laboratories shall bill the Inspection Body for all costs associated with this scheme, per the NIJ CTP-established rates (see NIJ CTP Document 100-1, Section 10.2.3). The Inspection Body shall then bill those costs to the Participant.

11.6. Surveillance Inspections

11.6.1. Surveillance inspections shall be performed for all participating models at each manufacturing location by third-party Inspection Bodies in compliance with ISO/IEC 17020.

11.6.2. Inspectors shall verify that Participants maintain material traceability sufficient to link ballistic panel serial number and or lot number to the:

- (1) purchase order of each bulk material used in the ballistic panel's construction,
- (2) Applicant's acceptance criteria,
- (3) evidence that materials met acceptance criteria, and
- (4) identification of the specific employee who made the determination and accepted the material for use.

11.6.3. An *initial product inspection* (Section 3.17) shall be scheduled by the Participant to take place during the first production run of the model following receipt of a NIJ Notice of Compliance.

11.6.4. Following the initial product inspection, models will typically be inspected at least once every 10 months. If a model is not being produced when it is due for an inspection, it shall be inspected during the next production run.

11.6.5. If the ballistic-resistant body armor model is manufactured under an NIJ CTP-approved body armor quality management system (BA 9000), the frequency of surveillance for that model/location may be reduced to once every 20 months.

11.6.6. The inspection frequency may be increased based on poor performance during any of the previous inspections of a facility or questionable performance of fielded armor.

11.7. Surveillance Inspection Process Requirements

11.7.1. Surveillance Inspection Methods and Procedures

11.7.1.1. Field Inspectors shall arrive at the designated manufacturing location during normal business hours with sufficient time to complete the inspection.

11.7.1.2. Within the United States, Field Inspectors shall be prepared to present credentials (including proof of ITAR compliance if requested) to the manufacturer's representative prior to entering restricted areas.

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- 11.7.1.3. The inspection form provided by the NIJ CTP consists of a listing of all models that are due for inspection. The Field Inspector should inspect as many models from this list as possible that both are available and meet all other sample quantity requirements. It is not necessary to inspect all models listed on the inspection form. The Field Inspector shall circle or otherwise indicate on the inspection form the models that were available and selected for inspection.
- 11.7.1.4. The Field Inspector shall verify that the Applicant is able to demonstrate traceability of all materials used in the selected samples.
- 11.7.1.5. Traceability shall be sufficient to link ballistic panel serial number and or lot number to:
- (1) purchase order of each bulk material used in the ballistic panel's construction,
 - (2) Participant's acceptance criteria,
 - (3) evidence that material met acceptance criteria, and
 - (4) specific employee who made the determination and accepted the material for use.
- 11.7.2. Inspection of Participant's Management System
- 11.7.2.1. As part of each surveillance inspection, the Inspection Body shall inspect the Participant's management system used in the manufacture of body armor listed on the NIJ CPL as compliant with the requirements of NIJ Standard 0101.07 and this scheme.
- 11.7.2.2. The management system inspection shall be combined with a product inspection.
- 11.7.2.3. The management system shall have a documented corrective action process that includes the following:
- (1) clearly identifying nonconformities, such as from complaints or internal and external audits and their associated requirements,
 - (2) establishing an initial containment plan to prevent any additional end users from being impacted by identified nonconformities,
Note: This initial containment plan may be more broad/severe than necessary.
 - (3) identifying the root cause(s)—not symptoms-- of the nonconformity,
 - (4) fully identifying the scope of the impact of the root cause, to include documentation listing serial number, lot number, date of manufacture, and manufacture location of impacted product and then updating initial containment plan with a long-term containment plan,
 - (5) correcting or destroying nonconforming work; this may include recalling impacted products,
 - (6) taking corrective actions to address root causes and prevent recurrence,
 - (7) recording results of actions taken, and
 - (8) reviewing the effectiveness of corrective actions.
- 11.7.2.4. The Participant's management system shall have a documented product recall plan that is proportional in nature and timely to the risks involved and includes the following:
- (1) recall policy,
 - (2) list of the documentation and records that will be created and maintained,
 - (3) list of the legal, industry, and regulatory requirements,

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- (4) identification and explanation of the roles and responsibilities of the recall management team,
- (5) description of the training and exercise requirements for members of the recall management team,
- (6) guidance on how product incidents will be investigated and how a decision will be made on whether a recall is necessary, and
- (7) identification of the resources required and processes used to implement a recall.

Note: This subclause has been adapted from ISO 10393:2013, which contains additional suggestions concerning a product recall.

11.7.3. Selection and Handling of FIT Test Items

11.7.3.1. Models of interest for FIT shall be identified and approved by the NIJ CTP before they are inspected.

11.7.3.2. Test items representing models of interest shall be randomly selected by the Field Inspector from among those available at the time of inspection. If no test items representing a model of interest are available, the Field Inspector shall document this, and the Participant shall be billed the minimal costs for the Inspection Body's time and expenses.

Note: As stated in Section 11.3.4, Participants are responsible for coordinating FITs with the Inspection Body by communicating when production of specific eligible armor models will take place and accommodating inspectors from the Inspection Body during times of production.

11.7.3.3. FIT test items shall not be accepted by the Field Inspector before they have completed the full manufacturing process and have had the NIJ Mark applied by the Applicant.

Note: Participants may temporarily cover the NIJ Mark (e.g., with a removable sticker) to indicate that an armor has not yet completed the full manufacturing process or inspections. This may be necessary when a label with the NIJ Mark is applied to an armor cover using heat that is incompatible with ballistic materials and therefore applied before final assembly is completed and inspected.

11.7.3.4. Prior to, or in conjunction with, the application of the NIJ Certification Mark, each ballistic panel shall also have a label that includes the model, serial number, lot number, and date of manufacture.

11.7.3.5. The Field Inspector shall randomly select test items from those available. If available, test items manufactured the same date as the inspection shall be selected. Otherwise, test items manufactured within 14 days of the inspection shall be selected. In either case, there shall be enough test items available at the time of the inspection that permits the Field Inspector to select the test items in a random manner (i.e., there shall be more test items for the Field Inspector to choose from than what is required per Section 11.7.3.6).

11.7.3.6. The number of test items (per model) selected by the Field Inspector for testing shall be in accordance with the quantities listed in Appendix E, Tables E.1–E.4, dependent on the NIJ Ballistic Protection Level of armor, if the armor is planar or nonplanar (and in the case of nonplanar armor, if the nonplanar armor has a corresponding planar armor model listed in an

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“Active” status on the NIJ 0101.07 CPL), and if the armor is Phase 1 or Phase 2 (soft armor only) testing:

- (1) NIJ Ballistic Protection Level HG1 or HG2 and Phase 1 – Refer to Appendix E, Table E.1 for sampling quantities.
- (2) NIJ Ballistic Protection Level HG1 or HG2 and Phase 2 – Refer to Appendix E, Table E.4 for sampling quantities and Section 11.8.5.3.
- (3) NIJ Ballistic Protection Level RF1 or RF2 (single, solid plate/panel) – Refer to Appendix E, Table E.3 for sampling quantities.
- (4) NIJ Ballistic Protection Level RF3 – Refer to Appendix E, Table E.3 for sampling quantities.

11.7.3.7. Models of Limited Coverage Armor (Section 5.3) listed on the NIJ CPL, which are size/shape variants of a full-coverage model, shall have surveillance (FIT) testing conducted during every other FIT test for the corresponding full-coverage model. As specified in Appendix E, Table E.2, six Limited Coverage Armors shall be randomly selected from the available production samples. The test requirements as specified in Section 11.8.2.3 shall apply.

11.7.3.8. ICW armor consists of both a stand-alone armor and a dependent ballistic panel. The dependent ballistic panel cannot be used alone but increases the effectiveness of the stand-alone armor. If the field inspection includes models that are in conjunction-dependent ballistic panels:

- (1) the Inspection Body shall instruct the Participant to also ship separately the associated stand-alone ballistic-resistant armor models to the appropriate test laboratory (per the quantities specified for the corresponding NIJ Ballistic Protection Level in Appendix E, Tables E.1–E.4), and
- (2) the stand-alone ballistic-resistant armor model is not required to be inspected and tested (alone) when included as a component of the ICW armor.

11.7.3.9. After selecting the test items, the Field Inspector shall maintain and document chain of custody of the test items until they are shipped to the appropriate test laboratory.

Note: The Participant may package, address, and prepay for package shipment if the Field Inspector takes possession of the package to drop at a mailing facility after leaving the manufacturing facility.

11.7.3.10. The Field Inspector shall include a test item identification form with at least the following information:

- (1) indication that enclosed test items are related to the FIT Program and what phase (Phase 1 or Phase 2),
- (2) FIT identification number,
- (3) test laboratory name, point of contact (POC), and address,
- (4) manufacturing location information (POC and address),
- (5) participant information (POC and address), and
- (6) model IDs of samples shipped with the form.

11.7.3.11. Materials used in the construction of ballistic-resistant body armor have demonstrated to be vulnerable to heat, moisture, and UV light. The Field Inspector shall use reasonable methods

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to limit exposure of the test items to these environmental conditions. This may be accomplished by both using the shipping materials typically used by the Participant and shipping to the appropriate test laboratory as soon as possible.

- 11.7.3.12. Following testing, the test items shall be shipped by the test laboratory directly to the NIJ CTP within 5 business days. If a perforation occurs, the test items shall be immediately shipped by overnight shipping. All test items shipped by the test laboratory to the NIJ CTP shall include the original shipping form from the inspection.

11.8. Surveillance Test Requirements

11.8.1. General Requirements

- 11.8.1.1. Surveillance testing shall be performed in compliance with NIJ Standard 0101.07, Sections 8 and 9 (Soft Armor) or 11 and 12 (Hard Armor), except as modified by this document.
- 11.8.1.2. Surveillance testing shall be performed within 1 month of receiving test items unless additional time is approved by the NIJ CTP in writing. Participants may observe testing of their armor and should coordinate with the test laboratory should they desire to do so (observation of the testing may occur virtually/remotely, if the laboratory offers that as an option).
- 11.8.1.3. Perforation testing (NIJ Standard 0101.07, Section 6.1, Section 9 [Soft Armor], and Section 10 [Hard Armor and ICW Armor]), modified as noted in Sections 11.8.2– 11.8.4, shall be performed on all test items. Testing shall continue until all panels are shot the required number of times. Testing shall not be discontinued because a perforation (i.e., complete penetration, ASTM 3005-20) occurs.
- 11.8.1.4. Backface Deformation (BFD) and Ballistic Limit shall not be measured as a part of surveillance testing.
- 11.8.1.5. Within the limits provided in NIJ Standard 0101.07, test laboratories should place shots on obvious or potential weaknesses such as seams, darts, and other types of discontinuities. For female models, refer to Appendix G of NIJ Standard 0101.07. Also, shots should be placed off obvious buildups or overlaps, such as are found on front-opening models.
- 11.8.1.6. The ballistic panels shall be marked and shot using normal procedures for shot pattern, shot-to-shot distance and shot-to-edge distance as described in NIJ Standard 0101.07.
 - 11.8.1.6.1. If the armor is NIJ Ballistic Protection Level HG1 or HG2, the specifications of Section 9.2 of NIJ Standard 0101.07 shall apply, except as modified in Section 11.8.2.2 of this scheme.
 - 11.8.1.6.2. If the armor is NIJ Ballistic Protection Level RF1, RF2, or RF3, the specifications of Section 12.2 of NIJ Standard 0101.07 shall apply.
- 11.8.1.7. Acceptance/Fail Criteria: General Requirements
 - 11.8.1.7.1. A surveillance test shall be considered to meet NIJ CTP surveillance program requirements if:
 - (1) the model tested has no perforations during testing, and

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- (2) the NIJ CTP's post-test review of the tested items and Participant-provided documentation determines that all program requirements are met, and
- (3) there are no construction variations when compared to the ITT documentation and archived test items for that model.

- 11.8.1.7.2. A single perforation during a surveillance test combined with a construction variation shall be considered a surveillance testing failure.
- 11.8.1.7.3. More than one perforation during surveillance testing shall be considered a surveillance testing failure.
- 11.8.1.7.4. A construction variation identified during surveillance testing shall be considered a surveillance testing failure, regardless of the ballistic test results.
- 11.8.1.7.5. Surveillance Testing Failures – General Requirements
 - 11.8.1.7.5.1. If a perforation occurs, testing must be completed, and the completed test report provided to the Inspection Body by the next business day following completion of testing.
 - 11.8.1.7.5.2. If a surveillance testing failure occurs, the Inspection Body must alert the NIJ CTP and provide a copy of the completed test report within 2 business days following completion of testing.
 - 11.8.1.7.5.3. All surveillance testing failures (defined in Sections 11.8.1.7.2–11.8.1.7.4) shall result in the issuance of a NIJ Advisory Notice, as well as a CTP notification to the Participant, requiring the Participant to complete a root cause analysis and corrective action plan to address the failure.
 - (1) Once the Participant's root cause analysis and corrective action plan has been reviewed by the NIJ CTP and approved by NIJ, the first surveillance test shall remain open until the Participant successfully completes new surveillance test to determine if the implementation of the Participant's corrective action plan has fully resolved the cause of the initial surveillance testing failure. Once this occurs, the NIJ Advisory Notice shall be marked as "Closed" on the CJTTEC website.
 - (2) If the Participant does not submit a root cause analysis in a timely manner, or the NIJ CTP determines the Participant's root cause analysis is not sufficient, the surveillance test may be closed as a surveillance testing failure and NIJ may issue a NIJ Safety Notice for the model and permanently move the model to the inactive list on the NIJ CPL.

11.8.2. Phase 1 Soft Body Armor Surveillance Testing

11.8.2.1. Test Item Conditioning – Phase 1

- 11.8.2.1.1. The test items shall be maintained at controlled ambient temperatures for 24 hours prior to testing, then submerged per Appendix A of NIJ Standard 0101.07.
- 11.8.2.1.2. Test items **shall not** be conditioned by tumbling.

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11.8.2.2. Number of shots per test item and threat rounds – Phase 1

11.8.2.2.1. Six shots per test item on four test items (24 total shots) shall be performed as is required for the Perforation-Backface Deformation (P-BFD) testing protocol (NIJ Standard 0101.07, Section 9), as modified below:

(1) For front panel test items (those with a neck scoop), a total of six shots shall be taken per panel. The laboratory, at their discretion, shall not take either Shot 2 or 3 (0-degree obliquity). The order of shots performed shall be: 1, either 2 or 3, 4, 5, 6, and 7.

(2) All other test requirements of NIJ Standard-0101.07, Section 9 shall apply.

11.8.2.2.2. Based on the armor's NIJ Ballistic Protection Level, the test threats shall be as indicated in NIJ Standard 0123.00, Section 4, Table 1.

11.8.2.2.3. Where two test threats are specified, half of the samples will be shot with each test threat for Phase 1 Testing (12 shots per test threat).

11.8.2.3. Limited Coverage Armor Surveillance Testing

11.8.2.3.1. Limited Coverage Armor test items used for Surveillance Testing shall be in accordance with the requirements described in Section 5.3 and Figure B of this scheme document.

11.8.2.3.2. A minimum of two fair hit shots shall be placed on each Limited Coverage Test item, as described in Section 5.3.4, Figure B.

11.8.2.3.3. A total of 12 shots (6 per test threat specified in the model's NIJ Ballistic Protection Level [NIJ Standard 0123.00]) shall constitute a Phase 1 Surveillance Test for Limited Coverage models.

11.8.2.4. Acceptance/Fail Criteria: Soft Armor - Phase 1

11.8.2.4.1. The Phase 1 test shall be considered to meet NIJ CTP surveillance program requirements if the requirements of Section 11.8.1.7.1 are met.

11.8.2.4.2. A single perforation during a Phase 1 Flexible Body Armor Surveillance Test of an armor that has no construction variations identified by the NIJ CTP is **not** considered a surveillance testing failure but requires Phase 2 Flexible Body Armor Surveillance Testing (Section 11.8.3) to be completed.

11.8.2.4.3. The Phase 1 test shall be considered a failure if any of the conditions described in Sections 11.8.1.7.2–11.8.1.7.4 occur.

11.8.2.4.4. All Phase 1 Soft Body Armor Surveillance Testing failures will follow the procedures in Section 11.8.1.7.5.

11.8.3. Phase 2 Soft Body Armor Surveillance Testing

11.8.3.1. Phase 2 Soft Body Armor Surveillance Testing shall be completed only if both a single perforation occurs during Phase 1 Soft Body Armor Surveillance Testing and the model's construction is verified to be consistent with the ITT documentation.

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- 11.8.3.2. The NIJ CTP shall notify the Inspection Body if Phase 2 Testing is necessary. The NIJ CTP shall then inform the Participant via a NIJ CTP Notification of both the perforation and the need for the Participant to supply and ship Phase 2 test items directly to the same test laboratory that performed Phase 1 Testing. The NIJ CTP shall also supply the Participant with a test item identification form to include with the test items. The test item identification form shall contain the information listed in Section 11.7.3.10.
- 11.8.3.3. Phase 2 test items shall consist of 10 panels. The ballistic panels that must be submitted for Phase 2 Testing are as follows:
- (1) side opening planar design: 10 ballistic panels (five front and five back).
 - (2) side opening nonplanar design: 10 ballistic panels that are representative of the panel that experienced the perforation during Phase 1 Testing (either 10 front [nonplanar] or 10 back [planar] ballistic panels; refer to Appendix E, Table E.4).
- 11.8.3.4. Phase 2 test items (panels) shall be from the same location, assembled using the same processes, and shall be the same model, shape, and size as the test item perforated during Phase 1 Testing.
- 11.8.3.5. Test Item Conditioning – Phase 2
- 11.8.3.5.1. The test items shall be maintained at controlled ambient temperatures for 24 hours prior to testing, then submerged per Appendix A of NIJ Standard 0101.07.
- 11.8.3.5.2. Test items **shall not** be conditioned by tumbling.
- 11.8.3.6. Number of shots per test item and threat rounds – Phase 2
- 11.8.3.6.1. Six shots per test item on 10 test items (60 total shots) shall be performed as is required for the P-BFD testing protocol (NIJ Standard 0101.07, Section 9), as modified below:
- (1) All 60 shots shall be taken with the threat round that caused the perforation in Phase 1 Testing.
 - (2) For front panel test items (those with a neck scoop), a total of six shots shall be taken per panel. The laboratory, at their discretion, shall not take either Shot 2 or 3 (0-degree obliquity). The order of shots performed shall be: 1, either 2 or 3, 4, 5, 6, and 7.
 - (3) All other test requirements of NIJ Standard-0101.07, Section 9 shall apply.
- 11.8.3.7. Acceptance/Fail Criteria: Soft Armor – Phase 2
- 11.8.3.7.1. The Phase 2 Soft Armor surveillance test shall be considered to meet NIJ CTP surveillance program requirements if the requirements of Section 11.8.1.7.1 are met.
- 11.8.3.7.2. A single perforation during Phase 1 Soft Body Armor Surveillance Testing combined with one or more perforations during Phase 2 Soft Body Armor Surveillance Testing shall be considered a surveillance testing failure.
- 11.8.3.7.3. A Phase 2 Soft Body Armor Surveillance Testing shall be considered a surveillance testing failure if any of the conditions described in Sections 11.8.1.7.2–11.8.1.7.4 occur.

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11.8.3.7.4. All Phase 2 Surveillance Testing failures shall follow the procedures in Section 11.8.1.7.5, and

(1) If a subsequent Phase 2 surveillance test:

- results in a single or multiple penetrations, and/or
- the NIJ CTP's post-test review of the tested items and Participant-provided documentation determines that all program requirements have not been met, and/or
- if there are construction variations when compared to the ITT documentation and archived test items for that model, then

the Surveillance Test shall be considered a surveillance testing failure and NIJ shall issue a NIJ Safety Notice for the model and remove the model from the NIJ CPL.

11.8.4. Hard Armor Surveillance Testing

11.8.4.1. Test Item Conditioning

11.8.4.1.1. The ballistic panels shall be maintained at controlled ambient temperatures for 24 hours prior to testing, then submerged per the procedures detailed in Appendix A of NIJ Standard 0101.07.

11.8.4.1.2. Test items **shall not** be conditioned by tumbling.

11.8.4.2. Number of Shots per Test Item and Threat Rounds

11.8.4.2.1. NIJ Ballistic Protection Level RF1 and NIJ Protection Level RF2 shall receive either three or six shots per test item, equivalent to the number of shots per test item as performed during the model's ITT (refer to Appendix E, Table E.3), or

11.8.4.2.2. NIJ Ballistic Protection Level RF3 shall receive one shot per test item (refer to Appendix E, Table E.3).

11.8.4.2.3. Based on the armor's NIJ Ballistic Protection Level, the threat rounds shall be as indicated in NIJ Standard 0123.00, Section 4, Table 2.

11.8.4.3. Acceptance/Fail Criteria: Hard Armor Surveillance Testing

11.8.4.3.1. The Hard Armor Surveillance test shall be considered to meet NIJ CTP surveillance program requirements if the requirements of Section 11.8.1.7.1 are met.

11.8.4.3.2. A Hard Armor Surveillance Test shall be considered a surveillance testing failure if any of the conditions described in Sections 11.8.1.7.2–11.8.1.7.4 occur.

11.8.4.3.3. All Hard Armor Surveillance Testing failures will follow the procedures in Section 11.8.1.7.5.

11.8.5. ICW Body Armor Surveillance Testing

11.8.5.1. The stand-alone element of the ICW armor shall be scheduled for surveillance without regard to the dependent ballistic-resistant panels.

11.8.5.2. Dependent ballistic-resistant panels of the ICW armor shall be scheduled for surveillance without regard to the stand-alone element. The number of test items shall be as specified

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in Appendix E, Table E.2. Following selection of the dependent ballistic panels, the Participant shall provide the appropriate number of the stand-alone armors to the test laboratory selected by the NIJ CTP.

- 11.8.5.3. If both elements of the ICW armor are determined to be soft armor, the ICW armor shall be tested in accordance with the requirements of Section 11.8.2; if one or more of the elements of the ICW armor are determined to be hard armor, the ICW armor shall be tested in accordance with the requirements of Section 11.8.4.
- 11.8.5.4. Dependent ballistic panels shall only be tested in combination with the stand-alone armor and shall be tested together as hard armor (see Section 11.7.3.8.(2)).
- 11.8.5.5. Pass/Fail Criteria for ICW Body Armor Surveillance Testing
 - (1) Shall be the same as described in Section 11.8.2.4 if the ICW armor consists entirely of soft armor components.
 - (2) Shall be the same as described in Section 11.8.4.3 if the ICW armor contains a hard armor component.

11.9. NIJ CTP Inspection of Surveillance Test Items and Report

- 11.9.1. The NIJ CTP shall inspect the laboratory test report for any inconsistencies concerning test data.
- 11.9.2. The NIJ CTP shall visually inspect all surveillance test items received from the test laboratory to verify consistency of construction and accuracy with the Participant's and test laboratory's description of the construction of the surveillance test items, as well as compared to archived previous test items and construction descriptions of the same model designation.
- 11.9.3. Surveillance test items inspected by the NIJ CTP, at the NIJ CTP's sole discretion, may be returned to the Participant at the Participant's expense, held by the NIJ CTP for future reference (e.g., ongoing product surveillance), or disposed of when the NIJ CTP determines they are no longer needed.

12. Product Certification Termination

- 12.1. The product certification termination requirements for models certified under this scheme shall be as described in NIJ CTP Conformity Assessment Document 100-1, Section 11.

13. Complaints and Requests for Reconsideration of Conformity Assessment Decisions

- 13.1. The process for complaints and requests for reconsideration of conformity assessment decisions for models certified under this scheme shall be as described in NIJ CTP Conformity Assessment Document 100-1, Section 12.

14. Changes and Revisions to Program Requirements

- 14.1. In general, changes to program requirements in this scheme shall be implemented as described in NIJ CTP Conformity Assessment Document 100-1, Section 13.

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14.2. When a revision occurs to the current standard and the revised standard is published, an implementation plan shall be set by the NIJ CTP. The implementation plan shall include the following:

- (1) the date of implementation,
- (2) the date when the NIJ CTP will stop accepting applications for the prior standard (the NIJ CTP may continue processing existing applications received prior to the announced deadline and ensuring those models complete the testing process),
- (3) the date when the NIJ CTP will begin accepting applications for the revised standard, and
- (4) the date when the NIJ CTP will begin surveillance for armor evaluated to the revised standard and listed on the NIJ CPL.

Note: Although surveillance may be occurring at the same time for models on both the prior standard's CPL and models on the revised standard CPL, surveillance shall be based on the standard applied to the model at the time of its initial certification.

14.3. The NIJ CTP shall communicate implementation plans to CTP stakeholders through established methods (e.g., website, email).

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15. Revision History

Revision	Section	Change	Name	Date
Revision 1.0	Initial Release	Complete revision of predecessor document (606.2.1, Version 1.1), with updated NIJ CTP document numbering convention; expanded definitions; discussions of program structure, roles, and responsibilities; and expanded discussion of program requirements. Also incorporates former NIJ CTP Scheme Document 606.2.2 (Follow-up Inspection and Testing). Refer to the cover sheet of this document for a complete listing of changes.	Mark Greene and Jared Gardner, NIJ Lance Miller and R. Alex Sundstrom, NIJ CTP (RTI International)	August 26, 2024

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Appendix A

Production Armor Labeling and Marking Requirements

As detailed in Section 7.5 of National Institute of Justice (NIJ) Standard 0101.07 and Sections 4.2.1.4 and 9.3 of this scheme, all production units of armor models listed on NIJ's Compliant Products List (CPL) must have a label, made of durable materials/printing method and contain the following information, permanently attached to the panel cover of each ballistic panel/plate.

The labels on test items (which have slightly different information requirements [detailed in Appendix F: Label Requirements, Section F.1: Label Content]) are evaluated in accordance with [ASTM D5264-98\(2019\)](#), *Standard Practice for Abrasion Resistance of Printed Materials by the Sutherland Rub Test*, as described in Section 13 and Appendix F, Label Requirements, of NIJ Standard 0101.07. As stated in Section 7.5.1.2 of NIJ Standard 0101.07, labels evaluated on test items *"shall match, in materials, manner of construction, printing, and ink(s), the label on a production armor."*

Labels on production units of NIJ-compliant models of armor shall contain the following information:

1. Name, logo, or other identification of the listed company and the address as identified on the CPL near the top of the label.

Note: A separate copy of the label must be provided for each listed company the model will be sold under.

2. The model designation as it appears on the Notice of Compliance.
3. The NIJ Mark standing by itself and not combined with any other logo, symbol, or graphic.
4. The applicable standard (NIJ Standard-0101.07) as it appears on the Notice of Compliance, placed immediately below the NIJ Mark.
5. Rated NIJ Ballistic Protection Level and reference to the standard (e.g., NIJ Standard 0123.00) defining this level of protection.
6. Size (if custom fitted, provision for the name of the individual for whom it is made).
7. Serial number.
8. Lot number if used by the Applicant to track armor construction.

Note: If individual armors are tracked entirely by a serial number, a lot number is not required.

9. Address of manufacturing location (to include street address, city/state/province/country, postal code).
10. Date of manufacture
11. Date of issue/issued to line (to be filled in by user).
12. Participant's "Declared Ballistic Performance Warranty Period" for the model with the originally declared threat level.

(continued on next page)

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13. Contact information for warranty support (e.g., telephone number, website, email address).

Note: The NIJ CTP Participant who submits the armor and is responsible for the model's ongoing compliance with program requirements shall determine the appropriate contact information. The CTP also recommends that contact information such as specific webpages, phone numbers, and email addresses be established for these purposes.

14. In type at least one and a half (1.5) times the size of the rest of the type on the label, the following warning: "This garment is rated only for the NIJ Ballistic Protection Level stated above."

15. If applicable, in type at least twice the size of the rest of the type on the label, a warning that the armor is not intended to protect the wearer from sharp-edged or pointed instruments.

Note: Printing color changes for warnings are acceptable but cannot be substituted for the type size requirement.

16. Proper orientation of the ballistic panel in the carrier clearly identified to indicate strike face or body side.

17. Care instructions for ballistic-resistant material in accordance with [16 CFR 423 Part 423](#), Care Labeling of Textile Wearing Apparel and Certain Piece Goods, as amended as of the date of the armor's manufacture (refer to the online CFR for most current updates); Federal Trade Commission Regulation Rule.

18. If the armor provides limited coverage protection, a warning in type at least twice the size of the rest of the type on the label, exclusive of the information required in (a) above, stating "Limited Coverage: This armor provides limited coverage for the torso against ballistic threats."

Note: Additional information may be included on the label at the discretion of the Participant if it does not interfere with the communication of the required information listed above.

Note: See sample ballistic panel label (Figure A.1) on next page.

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Listed Company's Logo / Name

Listed Company's Address, Phone Number, Website, Email, etc.

Model Designation: _____
(as listed on the NIJ Compliant Products List [CPL])



NIJ Standard 0101.07

NIJ Ballistic Protection Level (NIJ Standard 0123.00): _____
(Insert appropriate descriptions of test threats/velocities for applicable NIJ ballistic protection level)

Size: _____ Serial #: _____ Lot #: _____

Manufacturing Location: _____

Date of Manufacture: _____

Manufacturer's Declared Warranty Period (from date of manufacture): _____
For Warranty support/claims, contact *(website / email / phone)*

Date of Issue: _____ Issued to: _____

WARNING:

This garment is rated only for the NIJ Ballistic Protection Level stated above

This armor is not intended to protect the wearer from sharp edged or pointed instruments

(Only for armor models that provide limited coverage):

Limited Coverage: This armor provides limited coverage for the torso against ballistic threats

****Wear Face (This side to be worn against body)****

Care Instructions *(Sample Care Instructions shown):*

1. DO NOT Machine Wash or Dry, Dry Clean, or Iron	5. DO NOT store or dry in direct sunlight
2. Wipe with a damp cloth	6. DO NOT submerge in water or liquid
3. Only use mild detergent / dishwashing liquid	7. DO NOT store in extreme hot/cold temps
4. DO NOT use bleach to clean	8. DO NOT fold or crease panels

Figure A.1 Sample Production Ballistic Panel Label – Models That Comply with NIJ Standard 0101.07

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APPENDIX B

Guidance to NIJ CTP Participants Regarding Potentially Hazardous Materials Contained in Ballistic-Resistant Body Armor

The NIJ Compliance Testing Program (CTP) has an overarching interest to ensure the safety of CTP staff and of the staff at NIJ-approved test laboratories when they are handling test samples submitted by Participants as part of the operation of the NIJ CTP. Additionally, the CTP also has an interest in the potential health risks that are posed to end users of products evaluated by the NIJ CTP and found to comply with NIJ Standards; however, this is outside the scope of the NIJ CTP, and is the purview of other Federal agencies (e.g., Centers for Disease Control and Prevention [CDC], Occupational Safety and Health Administration [OSHA], National Institute for Occupational Safety and Health [NIOSH]).

Section 4.5 of this scheme document requires NIJ CTP Participants, as part of their individual model application submissions, to identify any atypical materials or material coatings contained in the model submission that are identified by OSHA as hazardous. Furthermore, the Participant must submit a safety data sheet (SDS) for all materials that are part of the construction of the armor regardless of whether they are considered atypical/hazardous or not.

NIJ must consider both the potential benefits and potential risks to human health that might accompany use of such atypical materials in body armor. Nanomaterials in particular present interesting possibilities for advances in technology, but might also expose humans to hazards during handling or use of products in which they are incorporated.¹ Carbon nanotubes (CNT) or other nanomaterials may pose health risks to the personnel involved in the testing or evaluation of body armor during and after testing, due to the destructive nature of the testing process on ballistic-resistant and stab-resistant body armor samples. This testing has the potential to alter the state of any encapsulation or containment that may have been present prior to testing. In situations where the permanent ballistic pad covers are breached through routine testing of the panels, testing personnel may be at risk of inhalation or absorption of nanoscale particulates.

These considerations extend to the health of end users such as police officers, where the ballistic pad cover may become breached through routine wear or an incident in which the armor is impacted by a ballistic threat in the field. In these scenarios, the encapsulation technique may also be compromised and create the potential for end users wearing body armor to be exposed to the CNTs or other

¹ For more information, please see the following resources at nano.gov, the official website of the United States National Nanotechnology Initiative:

“Responsible Development of Nanotechnology” at: <https://www.nano.gov/resources/research-community/responsible-development-nanotechnology>, and

“Approaches to Safe Nanotechnology: Managing the Health and Safety Concerns Associated with Engineered Nanomaterials” at: <https://www.cdc.gov/niosh/docs/2009-125/default.html>

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nanomaterials through inhalation or absorption. Although the use of CNTs in body armor is still relatively novel, law enforcement officers who may wear body armor containing CNTs or other nanomaterials, or who are considering doing so, should consider the potential health hazards these materials may present.

The NIJ CTP continues to monitor advisories and other notices from Federal agencies regarding the safety or use of materials or components used in the manufacture of products tested in accordance with this scheme and reserves the right to issue further Administrative Clarifications and/or remove models from the NIJ CPL when it is determined to be in the best interests of the criminal justice community.

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APPENDIX C

Ballistic Panel Cover Substitution

The NIJ CTP considers the ballistic panel cover to be an integral part of an armor's design. The NIJ CPL contains numerous armor models of soft armor, which contain different types of materials, stitching patterns, and other design characteristics that are unique to each model and which are identified on the NIJ CPL by unique model designations. Any change (i.e., *variation*) in the materials and/or design of these armor models normally requires the armor model to be submitted to the NIJ CTP as a new model with a new model designation.

As specified in Section 4.7.2 of this scheme document, the NIJ CTP will permit ballistic panel cover substitution as long as:

- 1) armor panels constructed identically to the originally tested, approved, and CPL-listed model, with the proposed new ballistic panel covering material, demonstrates equivalent performance to the approved model with the original panel cover material, and
- 2) the manufacturing facility where the armor model is produced is currently accredited to BA9000. Program Participants must first submit a request to the NIJ CTP by email to substitute panel cover materials before proceeding with testing.

Program Participants must then complete either Protocol A (requires more test items, as it evaluates submerged and tumbled armor separately) or Protocol B (requires fewer test items, as all test items are conditioned by tumbling, then submerged, prior to ballistic testing) at a NIJ-approved test laboratory to be considered eligible for a ballistic panel cover substitution. Program Participants are responsible for scheduling testing and covering all costs.

Protocol A:

A.1. Protocol A test items shall consist of 32 panels as described in Table A:

- a) 22 panels, with 10 panels (five with neck scoop, five without neck scoop) sized to the NIJ-C-5 template and 12 panels (eight with neck scoop and four without neck scoop) sized to the NIJ-C-1 template. Twenty panels (eight size NIJ-C-5 and 12 size NIJ-C-1) shall be conditioned by submerging per Appendix A of NIJ Standard 0101.07 prior to ballistic testing.
- b) Ten panels, with four panels (two with neck scoop, two without neck scoop) sized to the NIJ-C-5 template and six panels (four with neck scoop, two without neck scoop) sized to the NIJ-C-1 template. All 10 panels shall be conditioned by tumbling per ASTM E3192 and Sections 7.3.3 and 7.3.4 of NIJ Standard 010.07 prior to ballistic testing. The labeling requirements of Sections 7.5 and 13 of NIJ Standard 0101.07 shall also apply.

A.2. Based on the armor's NIJ Ballistic Protection Level, the threat rounds will be as indicated in NIJ Standard 0123.00, Section 4, Table 1.

A.3. Where two calibers are specified, half of the samples will be shot with each threat round.

A.4. Perforation testing (NIJ Standard 0101.07, Section 6.1.2.1 and 6.1.2.2, and Sections 8 and 9 [Soft Armor] or Sections 10 and 11 [Hard/ICW Armor]) shall be performed on all test items. Testing shall

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continue until all panels are shot the required number of times. Testing shall not be discontinued because a perforation (i.e., complete penetration, ASTM 3005-20) occurs.

- A.5. Backface Deformation (BFD) and Ballistic Limit shall not be measured as a part of this protocol.
- A.6. Within the limits provided in NIJ Standard 0101.07, test laboratories should place shots on obvious or potential weaknesses such as seams, darts, and other types of discontinuities. For female models, refer to Appendix G of NIJ Standard 0101.07. Also, shots should be placed off obvious buildups or overlaps, such as are found on front-opening models.
- A.7. The ballistic panels shall be marked and shot using normal procedures for shot pattern, shot-to-shot distance, and shot-to-edge distance as specified for NIJ Ballistic Protection Level HG1 or HG2, Section 9.2 of NIJ Standard 0101.07.
- A.8. The ballistic panels shall have seven shots per front ballistic panel and six shots per back panel shot as is required for the Perforation-Backface Deformation (P-BFD) testing protocol (NIJ Standard 0101.07, Section 9). As noted in Section 9.4.2.1 and Figures 2 and 3 of NIJ Standard 0101.07, for front panels (with neck scoop) of smaller test items (size NIJ-C-1), shots 1, 2, and 3 shall be marked on one test item, and shots 4, 5, 6, and 7 shall be marked on another.

(see Table A next page)

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Table A: Summary of Test Items Required for Ballistic Panel Cover Substitution: Protocol A

Size and Quantity of Test Items	Conditioning and Quantity of Test Items	Quantity of Test Items for Each Test			
Larger Size (NIJ-C-5 Template)	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	8	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1)	2
				Without Neck Scoop (Test Threat #1)	2
				With Neck Scoop (Test Threat #2)	2
				Without Neck Scoop (Test Threat #2)	2
	Spare	2		1 Test Item with Neck Scoop, 1 Test Item without Neck Scoop	2
Smaller Size (NIJ-C-1 Template)	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	12	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1) – Shots 1, 2, & 3	2
				With Neck Scoop (Test Threat #1) – Shots 4, 5, 6, & 7	2
				Without Neck Scoop (Test Threat #1)	2
				With Neck Scoop (Test Threat #2) – Shots 1, 2, & 3	2
				With Neck Scoop (Test Threat #2) – Shots 4, 5, 6, & 7	2
				Without Neck Scoop (Test Threat #2)	2
Larger Size (NIJ-C-5 Template)	Conditioning at controlled ambient for at least 24 hours followed by tumbling, per ASTM E3192	4	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1)	1
				Without Neck Scoop (Test Threat #1)	1
				With Neck Scoop (Test Threat #2)	1
				Without Neck Scoop (Test Threat #2)	1
Smaller Size (NIJ-C-1 Template)	Conditioning at controlled ambient for at least 24 hours followed by tumbling, per ASTM E3192	6	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1) – Shots 1, 2, & 3	1
				With Neck Scoop (Test Threat #1) – Shots 4, 5, 6, & 7	1
				Without Neck Scoop (Test Threat #1)	1
				With Neck Scoop (Test Threat #2) – Shots 1, 2, & 3	1

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				With Neck Scoop (Test Threat #2) – Shots 4, 5, 6, & 7	1
				Without Neck Scoop (Test Threat #2)	1

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Protocol B:

- B.1. Protocol B test items shall consist of 12 panels as described in Table B:
- a) Six panels, (three with neck scoop, three without neck scoop) sized to the NIJ-C-5 template and six panels (four with neck scoop and two without neck scoop) sized to the NIJ-C-1 template. Ten panels (four size NIJ-C-5 and six size NIJ-C-1) shall be conditioned by tumbling per ASTM E3192 and Sections 7.3.3 and 7.3.4 of NIJ Standard 010.07 prior to ballistic testing. The labeling requirements of Sections 7.5 and 13 of NIJ Standard 0101.07 shall also apply.
 - b) Upon completion of the tumbling and label testing requirements, the 10 panels shall be additionally conditioned by submerging per Appendix A of NIJ Standard 0101.07 prior to ballistic testing.
- B.2. Based on the armor's NIJ Ballistic Protection Level, the threat rounds will be as indicated in NIJ Standard 0123.00, Section 4, Table 1.
- B.3. Where two calibers are specified, half of the samples will be shot with each threat round.
- B.4. Perforation testing (NIJ Standard 0101.07, Section 6.1.2.1 and 6.1.2.2, and Sections 8 and 9 [Soft Armor] or Sections 10 and 11 [Hard/ICW Armor]) shall be performed on all test items. Testing shall continue until all panels are shot the required number of times. Testing shall not be discontinued because a perforation (i.e., complete penetration, ASTM 3005) occurs.
- B.5. BFD and Ballistic Limit shall not be measured as a part of this protocol.
- B.6. Within the limits provided in NIJ Standard 0101.07, test laboratories should place shots on obvious or potential weaknesses such as seams, darts, and other types of discontinuities. For female models, refer to Appendix G of NIJ Standard 0101.07. Also, shots should be placed off obvious buildups or overlaps, such as are found on front-opening models.
- B.7. The ballistic panels shall be marked and shot using normal procedures for shot pattern, shot-to-shot distance and shot-to-edge distance as specified for NIJ Ballistic Protection Level HG1 or HG2, Section 9.2 of NIJ Standard 0101.07.
- B.8. The ballistic panels shall have seven shots per front ballistic panel and six shots per back panel shot as required for the P-BFD testing protocol (NIJ Standard 0101.07, Section 9). As noted in Section 9.4.2.1 and Figures 2 and 3 of NIJ Standard 0101.07, for front panels (with neck scoop) of smaller test items (size NIJ-C-1), shots 1, 2, and 3 shall be marked on one test item, and shots 4, 5, 6, and 7 shall be marked on another.

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Table B: Summary of Test Items Required for Ballistic Panel Cover Substitution: Protocol B

Size and Quantity of Test Items	Conditioning and Quantity of Test Items	Quantity of Test Items for Each Test			
Larger Size (NIJ-C-5 Template)	Conditioning at controlled ambient for at least 24 hours followed by tumbling, per ASTM E3192; upon completion of tumbling, then followed by submersion, per Appendix A (NIJ Standard 0101.07)	4	P-BFD Test* (* -Penetration only; no BFD)	With Neck Scoop (Test Threat #1)	1
				Without Neck Scoop (Test Threat #1)	1
				With Neck Scoop (Test Threat #2)	1
				Without Neck Scoop (Test Threat #2)	1
	Spare	2		1 Test Item with Neck Scoop, 1 without Neck Scoop	2
Smaller Size (NIJ-C-1 Template)	Conditioning at controlled ambient for at least 24 hours followed by tumbling, per ASTM E3192; upon completion of tumbling, then followed by submersion, per Appendix A (NIJ Standard 0101.07)	6	P-BFD Test* (* -Penetration only; no BFD)	With Neck Scoop (Test Threat #1) – Shots 1, 2, & 3	1
				With Neck Scoop (Test Threat #1) – Shots 4, 5, 6, & 7	1
				Without Neck Scoop (Test Threat #1)	1
				With Neck Scoop (Test Threat #2) -Shots 1, 2, & 3	1
				With Neck Scoop (Test Threat #2) – Shots 4, 5, 6, & 7	1
				Without Neck Scoop (Test Threat #2)	1

Once either Protocol A or Protocol B has been completed, the laboratory test report must be submitted directly to the NIJ CTP by the NIJ-approved laboratory that conducted testing, regardless of the results.

For the substitute material to be considered for approval for use, the submitted test report must include data that demonstrates successful completion of all testing requirements described above and that the test items meet the performance requirements. Additionally, the material specification sheet and SDS for the substitute ballistic panel cover material must be submitted to the NIJ CTP for review.

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If approved by the NIJ CTP, the program Participant will be notified by email. The original and new ballistic panel cover material will be part of the design of that armor model and the submitted documentation will be added to the appropriate NIJ-approved model file. After approval, either ballistic panel cover may be used on that specific armor model listed on the NIJ CPL. Please note that ballistic panel cover substitution requirements described here are subject to change to ensure that the intent and scope of this clarification is maintained.

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APPENDIX D

Resources/Links Related to U.S. Import/Export Regulations and Requirements

The following narrative contains links to various U.S. Government websites providing information on U.S. Import/Export regulations and requirements. This is not a comprehensive list, and NIJ CTP Participants are encouraged to contact the appropriate U.S. Government agencies to obtain the most current information and/or to answer specific questions or concerns.

The information below was collected from the U.S. Small Business Administration website (<https://www.sba.gov/business-guide/grow-your-business/export-products/international-sales/know-import-export-laws-regulations>), July 2024:

The United States imposes export controls and sanctions to protect national security interests and promote foreign policy objectives. When exporting goods internationally, you should determine what authorization is required for your export either through the U.S. Department of State or the U.S. Department of Commerce. You also need to consider if there are sanctions on the countries, entities or individuals involved in any part of your transaction.

The Department of State's Directorate of Defense Trade Controls (DDTC) administers the International Traffic in Arms Regulations (ITAR) process that controls items, information, or activities that could be used for threatening foreign military purposes, whether actual products (defense articles) or assistance (defense services). Review the [United States Munitions List](#) first to determine if you must be registered and apply for an export license under ITAR. For questions about the ITAR controlled products and relevant license renewals, contact the U.S. Department of State's DDTC Response Team at 202-663-1282 and by email at DDTCCCustomerService@state.gov.

The Department of Commerce's [Bureau of Industry and Security \(BIS\)](#) administers and enforces the [Export Administration Regulations \(EAR\)](#), which primarily regulate the export and reexport of dual-use items (items with both commercial and military applications) and less sensitive military items (commodities, software, and technology). Watch "[Export Controls: A Quick Start Guide](#)" for an overview of BIS and how to determine if you need an export license. Review the [EAR](#) to determine if your product is subject to the EAR and requires BIS authorization prior to export. You will need to know the Export Control Classification Number (ECCN), country of destination, end user(s), and end use of your product to determine if you need an export license from BIS. You may request BIS to determine the ECCN of your product using the [Simplified Network Application Process Redesign \(SNAP-R\) web portal](#). Once you know your ECCN, you may use the [Commerce Country Chart](#) to determine if you require an export license based on the ECCN and country of destination.

BIS has a webpage for [small businesses](#) with links to useful resources, training videos, and a contact form for further assistance. BIS's [compliance page](#) offers guidance on how to set up an export compliance program (ECP), due diligence best practices, and information related to identifying red flags. You may also [submit your ECP](#) to BIS for review at no cost.

BIS offers free counseling on export controls via phone at 202-482-4811 (open Monday–Friday, 8:30 am–5 pm ET) or 949-660-0144 (open Monday–Friday, 8:30 am–5 pm PT). BIS also offers on-demand information for specific issues, such as exporting to [Russia or Belarus](#) and tips on [how to avoid dealing with unauthorized parties](#).

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To learn more about export controls, please review SBA Office of International Trade’s [Learn to Trade: Understanding Export Controls](#) webinar.

When selling or investing internationally, you must also comply with the Treasury Department’s Office of Foreign Assets Control (OFAC) [sanctions programs](#). These programs cover countries and foreign nationals restricted for foreign policy and national security goals. On OFAC’s website, you can find information on [country-specific sanctions programs](#). Questions on the Treasury Department’s sanction programs can be directed by email to ofac_feedback@treasury.gov and via the OFAC Hotline at 202-622-2480.

Use the [Consolidated Screening List](#) to screen the parties to your export transaction (e.g., purchasers, intermediate consignees [such as forwarding agents], ultimate consignees, end users). The consolidated screening list includes names of individuals and entities for which the U.S. Departments of Commerce, State, and the Treasury maintain restrictions on certain exports, re-exports, or transfers of items.

It is important to note that certain foreign investments and domestic real estate transactions can be subject to inspections by the [Committee on Foreign Investment in the United States](#).

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APPENDIX E

Summary of Test Items Required for Follow-up Inspection and Testing (FIT)

Table E.1: Summary of Test Items Required for Follow-up Inspection and Testing (FIT)

Phase 1 FIT – Planar and Nonplanar Models, NIJ HG1 and HG2

NIJ Ballistic Protection Level/Type of Test Items	Conditioning and Quantity of Test Items		Quantity of Test Items for Each Test		
HG1 and HG2 Planar Armor Models	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	4	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1)	1
				Without Neck Scoop (Test Threat #1)	1
				With Neck Scoop (Test Threat #2)	1
				Without Neck Scoop (Test Threat #2)	1
	Spare	2		1 Test Item with Neck Scoop, 1 without Neck Scoop	2
HG1 and HG2 Nonplanar Armor Models (If the Nonplanar Model has a corresponding Planar Model currently listed as “Active” on the NIJ 0101.07 Compliant Products List [CPL])	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	4	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1)	2
				With Neck Scoop (Test Threat #2)	2
	Spare	2		2 Test Items with Neck Scoop (front panel only)	2
HG1 and HG2 Nonplanar Armor Models (If the Nonplanar Model does not have a corresponding Planar Model currently listed as “Active” on the NIJ 0101.07 Compliant Products List [CPL])	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	8	P-BFD Test* (*-Penetration only; no BFD)	With Neck Scoop (Test Threat #1)	2
				Without Neck Scoop (Test Threat #1)	2
				With Neck Scoop (Test Threat #2)	2
				Without Neck Scoop (Test Threat #2)	2
	Spare	4		2 Test Items with Neck Scoop, 2 without Neck Scoop	4

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Table E.2: Summary of Test Items Required for Follow-up Inspection and Testing (FIT)
Phase 1 FIT – Limited Coverage and In-Conjunction with (ICW) Models

Type of Test Items	Conditioning and Quantity of Test Items		Quantity of Test Items for Each Test		
Limited Coverage Armor	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	6	P-BFD Test* (*-Penetration only; no BFD)	6 Test Items	6
In-Conjunction with (ICW) Armor	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	TBD (a)	P-BFD Test* (*-Penetration only; no BFD)	(a) Refer to either Table E.1 or E.3, per the rated NIJ Ballistic Protection Level (NIJ Standard 0123.00) of the ICW armor system. Collect the appropriate number of samples of each component of the ICW model (i.e., both soft and hard armor).	TBD (a)

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Table E.3: Summary of Test Items Required for Follow-up Inspection and Testing (FIT)

Phase 1 FIT – Hard Armor Models: NIJ RF1, RF2, and RF3

NIJ Ballistic Protection Level	Conditioning and Quantity of Test Items	Quantity of Test Items for Each Test			
RF1	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	6	P-BFD Test* (*-Penetration only; no BFD) 6 Shots per Test Item, per the model's ITT:	Test Threat #1	2
				Test Threat #2	2
				Test Threat #3	2
		12	P-BFD Test* (*-Penetration only; no BFD) 3 Shots per Test Item, per the model's ITT:	Test Threat #1	4
				Test Threat #2	4
				Test Threat #3	4
	Spare	2		2 Test Items	2
RF2	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	8	P-BFD Test* (*-Penetration only; no BFD) 6 Shots per Test Item, per the model's ITT:	Test Threat #1	2
				Test Threat #2	2
				Test Threat #3	2
				Test Threat #4	2
		16	P-BFD Test* (*-Penetration only; no BFD) 3 Shots per Test Item, per the model's ITT:	Test Threat #1	4
				Test Threat #2	4
				Test Threat #3	4
				Test Threat #4	4
	Spare	2		2 Test Items	2
RF3	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	6	P-BFD Test* (*-Penetration only; no BFD) 1 Shot per Test Item	Test Threat #1	6
	Spare	2		2 Test Items	2

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**Table E.4: Summary of Test Items Required for Follow-up Inspection and Testing (FIT)
Phase 2 FIT – Planar and Nonplanar Models, NIJ HG1 and HG2**

NIJ Ballistic Protection Level / Type of Test Items	Conditioning and Quantity of Test Items		Quantity of Test Items for Each Test		
Phase 2 FIT if a Single Penetration Occurred on a Planar Armor Model:					
HG1 and HG2 Planar Armor Models	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	10	P-BFD Test* (* -Penetration only; no BFD)	With Neck Scoop (Same Test Threat as perforation in Phase 1 FIT)	5
				Without Neck Scoop (Same Test Threat as perforation in Phase 1 FIT)	5
Phase 2 FIT if a Single Penetration Occurred on the <u>Front Panel</u> of a Nonplanar Armor Model:					
HG1 and HG2 Nonplanar Armor Models	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	10	P-BFD Test* (* -Penetration only; no BFD)	With Neck Scoop (Same Test Threat as perforation in Phase 1 FIT)	10
Phase 2 FIT If a Single Penetration Occurred on the <u>Back Panel</u> of a Nonplanar Armor Model:					
HG1 and HG2 Nonplanar Armor Models	Conditioning at controlled ambient for at least 24 hours followed by submersion, per Appendix A (NIJ Standard 0101.07)	10	P-BFD Test* (* -Penetration only; no BFD)	Without Neck Scoop (Same Test Threat as perforation in Phase 1 FIT)	10