

## COMPLIANCE TESTING PROGRAM

Administrative Clarification CTP 2022:01

February 1, 2022

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### Ballistic Panel Cover Substitution

The NIJ Compliance Testing Program (CTP) has received requests from program participants to substitute ballistic panel cover materials in armor models listed on the NIJ Compliant Product List (CPL) with another material that is nominally equivalent. The NIJ CTP understands these requests to substitute materials as attributable to supply chain issues causing the lack of availability of the original ballistic panel cover materials.

The ballistic panel cover is an integral part of an armor's design. The NIJ CPL contains numerous armor models of flexible armor (i.e., soft armor panels), which contain different types of materials, stitching patterns, and other design characteristics that are unique to each model and are identified on the NIJ CPL by unique model designations. Any change 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. However, the NIJ CTP will permit such substitution as long as armor panels with the new material demonstrates equivalent performance to the approved model with the original panel cover material and 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 or protocol B at an NIJ-approved laboratory in order to be considered eligible for a ballistic panel cover substitution. Program participants are responsible for scheduling testing and covering all costs.

#### Protocol A:

1. New Armor Testing in accordance with section 7.8 Perforation and Backface Signature Test (P-BFS) requirements of NIJ Standard 0101.06:
  - a. Nine (9) armors (18 panels):
    - i. Four (4) armors of the largest template size originally submitted
      1. Two (2) armors will be tested to threat 1.
      2. Two (2) armors will be tested to threat 2 .
    - ii. Four (4) armors of the smallest size template originally submitted
      1. Two (2) armors will be tested to threat 1.
      2. Two (2) armors will be tested to threat 2.
    - iii. One (1) spare in the template size that is equal to the largest template size original submitted.
    - iv. Only perforations shall be measured. Backface signature shall not be measured.

2. Flexible Armor Conditioning Protocol as identified in Section 5 of NIJ Standard 0101.06. These armors will be ballistically tested in accordance with Section 7.8 Perforation and Backface Signature Test (P-BFS) requirements for conditioned armor panels.
  - a. Four (4) armors (8 panels):
    - i. Two (2) armors of the largest template size originally submitted
      1. One (1) armor will be tested to threat 1.
      2. One (1) armor will be tested to threat 2.
    - ii. Two (2) armors of the smallest template size originally submitted
      1. One (1) armor will be tested to threat 1.
      2. One (1) armor will be tested to threat 2.
    - iii. Labels must meet the requirements identified in Section 4.1.5.3 Label Permanency and Durability for conditioned armor panels.
    - iv. Only perforations shall be measured. Backface signature shall not be measured.

Protocol B:

1. Flexible Armor Conditioning Protocol as identified in Section 5 of NIJ Standard 0101.06, followed by the submersion procedure outlined in section 7.8.2. These armors will be ballistically tested in accordance with Section 7.8 Perforation and Backface Signature Test (P-BFS) requirements for conditioned armor panels.
  - a. Four (4) armors (8 panels):
    - i. Two (2) armors of the largest template size originally submitted
      1. One (1) armor will be tested to threat 1.
      2. One (1) armor will be tested to threat 2.
    - ii. Two (2) armors of the smallest template size originally submitted
      1. One (1) armor will be tested to threat 1.
      2. One (1) armor will be tested to threat 2.
    - iii. Labels must meet the requirements identified in Section 4.1.5.3 Label.
    - iv. Only perforations shall be measured. Backface signature shall not be measured.

Whether following either Protocol A or Protocol B, only perforations will be considered regarding the performance of test items. Any fair hits that cause a perforation shall constitute a failure. Backface signature shall not be considered.

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. In order 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.

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.