# NIJ Standard 0101.07, Ballistic Resistance of Body Armor Addendum 3

# **November 25, 2025**

This addendum includes revisions to NIJ Standard 0101.07, *Ballistic Resistance of Body Armor*, and Addendum 1 and Addendum 2 of that standard. Users of the NIJ Standard should incorporate the revisions in this addendum as a part of the NIJ Standard.

The revisions are presented in the following format:

**Revision:** [description of the revision]

[relevant section of NIJ Standard 0101.07, Addendum 1, or Addendum 2 with new or modified text in red and text to be removed in red strikethrough.]

\*\*\* REVISIONS \*\*\*

**Revision:** Modified section 3.2.3. as revised in Addendum 2 to clarify the definition of complete penetration.

## Version in Addendum 2:

- 3.2.3. *complete penetration* (CP), n. the result of a test threat impact if one or more of the following conditions are met:
  - (1) any portion of a test threat or a fragment of a test threat passes through the wear face of the test item.
  - (2) the test threat is visible from the wear face of the test item.
  - (3) a hole is created through the test item by the test threat.
  - (4) for soft armor, any portion of a test threat or a fragment of a test threat is embedded in or passes into the backing material directly behind the test item.
  - (5) for any shot at a nonzero angle of obliquity on soft armor, including shot 7, any portion of a test threat or a fragment of a test threat that is visible through the panel cover
  - (6) for any shot at a nonzero angle of obliquity on soft armor, including shot 7, if the shot exits the panel cover from the edge and is not retained by the ballistic panel.
  - (7) for any shot at a nonzero angle of obliquity on soft armor, including shot 7, any portion of a test threat or a fragment of a test threat deflecting toward an edge between layers of ballistic material that meets *all* the following three conditions: (a) breaks the ballistic panel cover;

- (b) is visible when facing the wear face (i.e., line of sight is normal to the wear face); and
- (c) extends beyond the edge contour of the armor panel.

NOTE: Any portion of a test threat or a fragment of a test threat that penetrates through the polycotton carrier shall indicate a complete penetration. The edge contour shall be defined as the outer edge of any unpenetrated layer of ballistic material on the wear face side of the armor panel.

- (8) for hard armor, any portion of a test threat or a fragment of a test threat embedded in or passes into the backing material directly behind the test item.
- (9) for hard armor, a fragment of any hard component of the test item that penetrates the cover material on the back of the test item.

NOTE: For the purposes of this definition, ceramics and metals shall be considered hard components.

NOTE: Spall embedded in the clay surface beyond the perimeter of the test item shall not be considered a complete penetration.

## Revised to state:

3.2.3. *complete penetration* (CP), n. – the result of a test threat impact if one or more of the following conditions are met:

# For all armor:

- (1) any portion of a test threat or a fragment of a test threat passes through the wear face of the test item.
- (2) the test threat is visible from the wear face of the test item.
- (3) a hole is created through the test item by the test threat.
- (4) for soft armor, any portion of a test threat or a fragment of a test threat is embedded in or passes into the backing material directly behind the test item.

## For shot 7 on soft armor:

- (5) for any shot at a nonzero angle of obliquity on soft armor, including shot 7, any portion of a test threat or a fragment of a test threat that is visible through the panel cover.
- (6) for any shot at a nonzero angle of obliquity on soft armor, including shot 7, if the shot exits the panel cover from the edge and is not retained by the ballistic panel.
- (5) any portion of a test threat or a fragment of a test threat that is not retained by the ballistic panel after impact.
- (6)(7) for any shot at a nonzero angle of obliquity on soft armor, including shot 7, any portion of a test threat or a fragment of a test threat deflecting toward an edge

between layers of ballistic material at the edge of the ballistic panel that meets *all* the following three conditions:

- (a) breaks the ballistic panel cover;
- (b) is visible when facing the wear face (i.e., line of sight is normal to the wear face); and
- (c) extends beyond the edge contour of the armor panel.

NOTE: Any portion of a test threat or a fragment of a test threat that penetrates through the polycotton carrier shall indicate a complete penetration. The edge contour shall be defined as the outer edge of any unpenetrated layer of ballistic material on the wear face side of the armor panel.

#### For hard armor:

- (8) for hard armor, any portion of a test threat or a fragment of a test threat embedded in or passes into the backing material directly behind the test item.
- (7)(9) for hard armor, a fragment of any hard component of the test item that penetrates the cover material on the back of the test item.

NOTE: For the purposes of this definition, ceramics and metals shall be considered hard components.

NOTE: Spall embedded in the clay surface beyond the perimeter of the test item shall not be considered a complete penetration.

*Revised version without markup for better readability:* 

3.2.3. *complete penetration* (CP), n. – the result of a test threat impact if one or more of the following conditions are met:

## For all armor:

- (1) any portion of a test threat or a fragment of a test threat passes through the wear face of the test item.
- (2) the test threat is visible from the wear face of the test item.
- (3) a hole is created through the test item by the test threat.
- (4) any portion of a test threat or a fragment of a test threat is embedded in or passes into the backing material directly behind the test item.

# For shot 7 on soft armor:

- (5) any portion of a test threat or a fragment of a test threat that is not retained by the ballistic panel after impact.
- (6) any portion of a test threat or a fragment of a test threat at the edge of the ballistic panel that meets *all* the following three conditions:
  - (a) breaks the ballistic panel cover;

- (b) is visible when facing the wear face (i.e., line of sight is normal to the wear face); and
- (c) extends beyond the edge of the armor panel.

NOTE: Any portion of a test threat or a fragment of a test threat that penetrates through the polycotton carrier shall indicate a complete penetration.

# For hard armor:

(7) a fragment of any hard component of the test item that penetrates the cover material on the back of the test item.

NOTE: For the purposes of this definition, ceramics and metals shall be considered hard components.

NOTE: Spall embedded in the clay surface beyond the perimeter of the test item shall not be considered a complete penetration.

**Revision:** Corrects error caption of Figures X.2 in Addendum 2.

Figure X.2. Shot locations for shots 1, 2, and 3 on a C-5 panel for B-PBD testing of soft armor. Shots shall be placed within the shaded bands where the light gray band applies to the lesser mass test threat and dark gray band applies to the greater mass test threat. Each band is 0.75 in. wide and the center of the band represented by the dashed white line approximate the minimum shot-to-edge distance for the respective test threats. Note that the overlaid bands in this figure are for illustrative purposes and may not be exactly to scale. Shot 1, shot 3, and shot 3 on odd-numbered test items shall be taken in the green regions. Shot 1, shot 3, and shot 3 on even-numbered test items shall be taken in the green regions.

## *Revised to state:*

Figure X.2. Shot locations for shots 1, 2, and 3 on a C-5 panel for B-PBD testing of soft armor. Shots shall be placed within the shaded bands where the light gray band applies to the lesser mass test threat and dark gray band applies to the greater mass test threat. Each band is 0.75 in. wide and the center of the band represented by the dashed white line approximate the minimum shot-to-edge distance for the respective test threats. Note that the overlaid bands in this figure are for illustrative purposes and may not be exactly to scale. Shot 1, shot 3 2, and shot 3 on odd-numbered test items shall be taken in the green regions. Shot 1, shot 3 2, and shot 3 on even-numbered test items shall be taken in the green orange regions.