**2. NIJ BODY ARMOR CLASSIFICATION**

Personal body armor covered by this standard is classified into five types (IIA, II, IIIA, III, IV) by level of ballistic performance. In addition, a special test class is defined to allow armor to be validated against threats that may not be covered by the five standard classes.

The classification of an armor panel that provides two or more levels of NIJ ballistic protection at different locations on the ballistic panel shall be that of the minimum ballistic protection provided at any location on the panel.

# Type IIA (9 mm; .40 S&W)

Type IIA armor that is new and unworn shall be tested with 9 mm Full Metal Jacketed Round Nose (FMJ RN) bullets with a specified mass of 8.0 g (124 gr) and a velocity of 373 m/s

± 9.1 m/s (1225 ft/s ± 30 ft/s) and with .40 S&W Full Metal Jacketed (FMJ) bullets with a specified mass of 11.7 g (180 gr) and a velocity of 352 m/s ± 9.1 m/s (1155 ft/s ± 30 ft/s).

Type IIA armor that has been conditioned shall be tested with 9 mm FMJ RN bullets with a specified mass of 8.0 g (124 gr) and a velocity of 355 m/s ± 9.1 m/s (1165 ft/s ± 30 ft/s) and with .40 S&W FMJ bullets with a specified mass of 11.7 g (180 gr) and a velocity of 325 m/s ± 9.1 m/s (1065 ft/s ± 30 ft/s).

# Type II (9 mm; .357 Magnum)

Type II armor that is new and unworn shall be tested with 9 mm FMJ RN bullets with a specified mass of 8.0 g (124 gr) and a velocity of 398 m/s ± 9.1 m/s (1305 ft/s ± 30 ft/s) and with

.357 Magnum Jacketed Soft Point (JSP) bullets with a specified mass of 10.2 g (158 gr) and a velocity of 436 m/s ± 9.1 m/s (1430 ft/s ± 30 ft/s).

Type II armor that has been conditioned shall be tested with 9 mm FMJ RN bullets with a specified mass of 8.0 g (124 gr) and a velocity of 379 m/s ±9.1 m/s (1245 ft/s ± 30 ft/s) and with

.357 Magnum JSP bullets with a specified mass of 10.2 g (158 gr) and a velocity of 408 m/s ±9.1 m/s (1340 ft/s ± 30 ft/s).

# Type IIIA (.357 SIG; .44 Magnum)

Type IIIA armor that is new and unworn shall be tested with .357 SIG FMJ Flat Nose (FN) bullets with a specified mass of 8.1 g (125 gr) and a velocity of 448 m/s ± 9.1 m/s (1470 ft/s ± 30 ft/s) and with .44 Magnum Semi Jacketed Hollow Point (SJHP) bullets with a specified mass of 15.6 g (240 gr) and a velocity of 436 m/s ± 9.1 m/s (1430 ft/s ± 30 ft/s).

Type IIIA armor that has been conditioned shall be tested with .357 SIG FMJ FN bullets with a specified mass of 8.1 g (125 gr) and a velocity of 430 m/s ± 9.1 m/s (1410 ft/s ± 30 ft/s) and with .44 Magnum SJHP bullets with a specified mass of 15.6 g (240 gr) and a velocity of 408 m/s ± 9.1 m/s (1340 ft/s ± 30 ft/s).

# Type III (Rifles)

Type III hard armor or plate inserts shall be tested in a conditioned state with 7.62 mm FMJ, steel jacketed bullets (U.S. Military designation M80) with a specified mass of 9.6 g (147 gr) and a velocity of 847 m/s ± 9.1 m/s (2780 ft/s ± 30 ft/s).

Type III flexible armor shall be tested in both the “as new” state and the conditioned state with 7.62 mm FMJ, steel jacketed bullets (U.S. Military designation M80) with a specified mass of 9.6 g (147 gr) and a velocity of 847 m/s ± 9.1 m/s (2780 ft/s ± 30 ft/s).

For a Type III hard armor or plate insert that will be tested as an *in conjunction* design, the flexible armor shall be tested in accordance with this standard and found compliant as a stand-alone armor at its specified threat level. The combination of the flexible armor and hard armor/plate shall then be tested as a system and found to provide protection at the system’s specified threat level. NIJ-approved hard armors and plate inserts must be clearly labeled as providing ballistic protection only when worn in conjunction with the NIJ-approved flexible armor system with which they were tested.

# Type IV (Armor Piercing Rifle)

Type IV hard armor or plate inserts shall be tested in a conditioned state with .30 caliber armor piercing (AP) bullets (U.S. Military designation M2 AP) with a specified mass of 10.8 g (166 gr) and a velocity of 878 m/s ± 9.1 m/s (2880 ft/s ± 30 ft/s).

Type IV flexible armor shall be tested in both the “as new” state and the conditioned state with .30 caliber AP bullets (U.S. Military designation M2 AP) with a specified mass of 10.8 g (166 gr) and a velocity of 878 m/s ± 9.1 m/s (2880 ft/s ± 30 ft/s).

For a Type IV hard armor or plate insert that will be tested as an *in conjunction* design, the flexible armor shall be tested in accordance with this standard and found compliant as a stand-alone armor at its specified threat level. The combination of the flexible armor and hard armor/plate shall then be tested as a system and found to provide protection at the system’s specified threat level. NIJ-approved hard armors and plate inserts must be clearly labeled as providing ballistic protection only when worn in conjunction with the NIJ-approved flexible armor system with which they were tested.

# Special Type

A purchaser having a special requirement for a level of protection other than one of the above standard types and threat levels should specify the exact test round(s) and reference measurement velocities to be used and indicate that this standard shall govern all other aspects. Guidance on common special type threats and the appropriate threat velocities is provided in appendix B, along with a methodology for determining the correct reference velocity for other threats.