

116373

U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this ~~copyrighted~~ material has been granted by

Public Domain/OJP/NIJ
U.S. Department of Justice
to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the ~~copyright~~ owner.

M/

116373



National Institute of Justice

Technology Assessment

March 1989

TECHNOLOGY ASSESSMENT PROGRAM

POLICE BODY ARMOR

Consumer Product List—3d edition

The body armor models identified in this third edition of the Consumer Product List (CPL) have been tested by the National Institute of Justice Technology Assessment Program and found to comply with the requirements of *NIJ Standard-0101.03, Ballistic Resistance of Police Body Armor* (April 1987). Armor that complies with the standard meets the minimum performance requirements critical for police protection.

Body armor CPL's are updated every 6 months to include additional models of armor that have been tested and found to comply with the standard. Manufacturer models not included here were either not tested by NIJ or were tested and failed to comply with the standard.

This CPL is divided into two general categories of body armor: Armor suitable for routine full-time wear, which includes types I, II-A, and II; and armor suitable for terrorist threat and tactical use when weight and bulk are less of a factor, which includes types III-A, III, and IV. To comply with the NIJ standard, an armor model must, on inspection, meet the workmanship and labeling requirements of the standard. The armor also must meet the

penetration and deformation requirements when tested in both wet and dry conditions.

When using this CPL to purchase armor, select armor that will provide the necessary level of protection. Armor selection is briefly discussed below. You are also encouraged to read NIJ Guide 100-87, "Selection and Application Guide to Police Body Armor," which discusses armor in detail.

Body Armor Selection

Police administrators should make every effort to encourage their officers to wear body armor throughout each duty shift. Although designed primarily to provide protection against handgun assault, soft body armor has prevented serious and potentially fatal injuries from traffic accidents (both automobiles and while operating motorcycles), from physical assault with improvised clubs, and to some extent from knives. Law enforcement officer fatality statistics are compiled annually by the Federal Bureau of Investigation. Analysis of the statistics suggests that a large percentage of the officer fatalities reported each year could have been prevented if the officer had been wearing armor.

The fundamental considerations in selecting armor are the threat to which officers are exposed and the nature of their own service weapons. Knowledge of the street weapons in the local area (confiscated weapons are a good indicator) is essential, for the armor should be selected to protect against the street threat, and the department's service weapons. Throughout the last decade, one in five officers killed was shot with his or her own weapon. Full coverage of the torso is critical because the most common fatalities among officers wearing armor result from bullets

This third edition of the Consumer Product List identifies 28 additional models that were tested and found to comply with the standard. CPL's are updated every 6 months; this one supersedes all previous editions and will be obsolete 6 months after the date on the masthead. For the most current CPL or an updated list of models that comply with the standard prior to the next published update, call or write the Technology Assessment Program Information Center, Box 6000, Rockville, MD 20850, 1-800-248-2742 (1-301-251-5060 in Maryland and Metropolitan Washington, D.C.).

Continued on page 3

Armor Suitable for Routine Full-Time Wear:
Complies with NIJ Standard-0101.03

Manufacturer

Models complying by armor type*

	Type I	Type II-A	Type II
American Body Armor	ABA-1 ABA-2 (female) ABA-12	ABA-3 ABA-5 ABA-209	ABA-8 ABA-17 ABA-31 ABA-40 ABA-202 ABA-207 (female)
A&B Industries (Top-Line)		20-2A	
Blauer	12616	12632	
Point Blank	8 8 (female) 10 10 (female) 100 100 (female)	15 150 15.03 (female) 150.03 (female)	20 (female) 21 21 (female) 200 (female) 200.03 26/260 Internat'l 26/260 Internat'l (female) NYSP 21.03 NYSP 21.03 (female) 20.03 220.03 20 USMS 20 USMS (female) 20HP
Progressive Apparel Corporation		ES-15Q40 ES-15Q40 <i>Style DS-16S</i> ES-1530PF ESW15Q40 (female)	ES-1840PF ES-1840PF <i>Style DS-18S</i>
Protective Apparel Corporation		16 <i>Style WC</i>	21 <i>Style WC</i> 21 <i>Style MS PACA (female)</i>
Safariland	FLX1-12 CL1-1	CL-2A FLX2A-20 CLF-2A (female)	CL-2 CL-2 <i>Style Contour</i> FLX2-24
Second Chance		Y2AW Y2AWC (female) SUPERfeatherlite IIA SUPERfeatherlite IIA-T-FEM (female)	Z2WC (female) SUPERfeatherlite II-T-MAL SUPERfeatherlite II-T-FEM (female) Z2WM Z2W-M2
U.S. Armor		USIIA-SP	

- Type I armor provides multiple-hit protection against .38 Special RN lead 158 gr bullets to a maximum velocity of 850 ft/s and .22 LRHV lead 40 gr bullets to a maximum velocity of 1050 ft/s.
- Type II-A armor provides multiple-hit protection against .357 Magnum JSP 158 gr bullets to a maximum velocity of 1250 ft/s and 9 mm FMJ 124 gr bullets to a maximum velocity of 1090 ft/s.
- Type II armor provides multiple-hit protection against .357 Magnum JSP 158 gr bullets to a maximum velocity of 1395 ft/s and 9 mm FMJ 124 gr bullets to a maximum velocity of 1175 ft/s.

Armor Suitable for Terrorist Threat and Tactical Use Only:
Complies with NIJ Standard-0101.03

Manufacturer	Models complying by armor type*			Combination Types III and IV
	Type III-A	Type III	Type IV	
American Body Armor	ABA-101 ABA-105 ABA-201 ABA-206 (female)	ABA-15		
Point Blank	280HP 28/280.03 28/280.03 (female) 30/300 30/300 (female) 28/280-.03HP (female)	DHSP		CP3
Progressive Apparel Corporation	ES23 50PF			
Protective Apparel Corporation	26 <i>Style</i> Nato 26 <i>Style</i> WC			
Safariland	CL-3A-30 CL-3A-30 <i>Style</i> Contour			
Second Chance	Z3AWC Z3AWC (female)	Y2AWK-47		

- Type III-A armor provides multiple-hit protection against .44 Magnum lead SWC gas checked 240 gr bullets and 9 mm FMJ 124 gr bullets, both to a maximum velocity of 1400 ft/s.
- Type III armor provides multiple-hit protection against 7.62 mm (308 Winchester) FMJ 150 gr bullets to a maximum velocity of 2750 ft/s.
- Type IV armor provides at least single-hit protection against 30-06 AP 166 gr bullets to a maximum velocity of 2850 ft/s.

* The Technology Assessment Program will provide copies of the NIJ body armor guide and standard and complete test results for any or all of the models listed in this CPL. Test results for manufacturers' models that were tested and found not to comply with the standard are also available on request. Call the Technology Assessment Program at 1-800-248-2742 or 1-301-251-5060 in Maryland and Metropolitan Washington, D.C.

entering an officer's side through the opening between front and rear panels.

Type I body armor, which was issued during the NIJ demonstration project in 1975, is the minimum level of protection that any officer should have and is suitable for full-time wear. Officers who desire more than minimum protection should wear type II-A armor, which has been found sufficiently comfortable for full-time wear when the threat warrants it, particularly for departments that use lower velocity .357 Magnum service weapons. Type II armor, heavier and more bulky than type II-A, is worn full-time by officers in some departments but may not be considered suitable for full-time use in hot, humid climates.

Type III-A armor, which provides the highest level of protection available in soft body armor, is generally considered to be unsuitable for routine wear. However, individuals confronted with a terrorist threat may be willing to tolerate the weight and bulk of such armor while on duty. Types III and IV armor are clearly intended for use only in tactical situations when the threat warrants such protection.

It is absolutely essential that those who select body armor, and each officer who wears it, realize that there is no such thing as a *bulletproof* vest. The routine use of appropriate soft body armor *significantly* reduces the likelihood of fatal injury, but 100-percent protection in all circumstances is impossible. Body armor selection is to

some extent a tradeoff between ballistic protection and wearability. The weight and bulk of soft body armor are proportional to the level of ballistic protection it provides; therefore, comfort decreases as the protection level increases.

All departments should strive to select armor that their officers will wear, consistent with their ballistic protection requirements. Agencies should ensure that each officer knows and understands the protection that it affords, as well as its limitations. Body armor that is not worn provides *no* protection.

The Technology Assessment Program is supported by Cooperative Agreement #85-IJ-CX-K040 awarded by the U.S. Department of Justice, National Institute of Justice. Analyses of test results do not represent product approval or endorsement by the National Institute of Justice, the National Institute of Standards and Technology (formerly called the National Bureau of Standards), the U.S. Department of Commerce, or Aspen Systems Corporation.

The Assistant Attorney General, Office of Justice Programs, coordinates the activities of the following program Offices and Bureaus: National Institute of Justice, Bureau of Justice Statistics, Bureau of Justice Assistance, Office of Juvenile Justice and Delinquency Prevention, and Office for Victims of Crime.

U.S. Department of Justice
Office of Justice Programs
National Institute of Justice

Washington, D.C. 20531

Official Business
Penalty for Private Use \$300

BULK RATE POSTAGE & FEES PAID DOJ/NIJ Permit No. G-91
--

**DON'T BECOME ANOTHER STATISTIC
WEAR YOUR ARMOR**