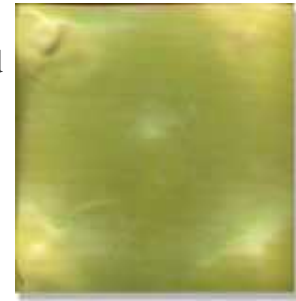


## Aramid panels

Aramid fiber is an organic polymer (aromatic polyamide) produced from a liquid chemical blend, being spun into a solid fiber. Aramid fiber is better known by trade names such as Kevlar® (Dupont) and Twaron® (Teijin Twaron).

Aramid is usually yellow in appearance, has high strength and low density. Aramid has excellent energy absorption properties. Aramid is also resistant to abrasion and thermal degradation. Our aramid panels are produced from a 3000 denier aramid fabric, laminated in a prescribed number of layers, using a thermo formable adhesive film. Aramid panels are laminated in a matrix of fabric and pre-cured film. The panels can easily be cut to size and shape desired with a jig saw and knife blade attached.



Aramid panel shot 5 times with 44 Mag. Showing no penetrations

**Product Advantages:** Aramid panels are designed with manufacturing requirements for weight, cost, formability, and performance in mind. Ease of installation reduces overall cost of the finished product.

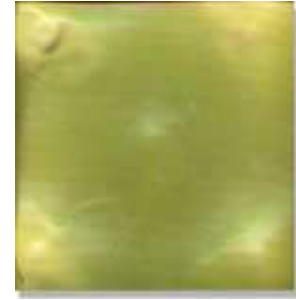
*Flexible Aramid Ballistic Panels*

Weight per Sq.Ft.	Nominal Thickness in (mm)	Ballistic Specification Data Sheet		
		UL - 752 Rev.9 NIJ 0108.01 Levels	Weapon & Bullet Description	Impact Velocity ft/sec (m/sec)
.6 lb	5/32 - 3.96	1 IIA In conjunction with vehicle metal	9mm 124gr FMJ 357Mag. 158gr JSP	1114 - 334 1280 - 345
.7 lb	5/32 - 3.96	2 II In conjunction with vehicle metal	9mm 124gr FMJ 357Mag. 158gr JSP	1175 - 358 1395 - 381
.8 lb	3/16 - 4.76	1 & 2 II Stand alone	9mm 124gr FMJ 357Mag. 158gr JSP	1175 - 358 1395 - 381
.8 lb	3/16 - 4.76	1, 2, 3 & 6 IIIA In conjunction with vehicle metal	44 Mag. 240gr SWC 9mm 124gr FMJ	1400 - 426 1400 - 426
1.1 lb	7/32 - 5.55	1, 2, 3 & 6 IIIA Stand alone	44 Mag. 240gr SWC 9mm 124gr FMJ	1400 - 426 1400 - 426

## Armor shields

Armorshield is created from aramid fiber.

Aramid is usually yellow in appearance, has high strength and low density. Aramid has excellent energy absorption properties. Aramid is also resistant to abrasion and thermal degradation. Our aramid panels are produced from a 3000 denier aramid fabric, laminated in a prescribed number of layers, using a thermo formable adhesive film. Aramid panels are laminated in a matrix of fabric and pre-cured film. The panels can easily be cut to size and shape desired with a jig saw and knife blade attached.



Armorshield panel shot 5 times with 44 Mag. Showing no penetrations

**Product Advantages:** Aramid panels are designed with manufacturing requirements for weight, cost, formability, and performance in mind. Ease of installation reduces overall cost of the finished product.

### *Flexible Aramid Ballistic Panels*

Weight per Sq.Ft.	Nominal Thickness in (mm)	Ballistic Specification Data Sheet		
		UL - 752 Rev.9 NIJ 0108.01 Levels	Weapon & Bullet Description	Impact Velocity ft/sec (m/sec)
.6 lb	5/32 - 3.96	1 IIA In conjunction with vehicle metal	9mm 124gr FMJ 357Mag. 158gr JSP	1114 - 334 1280 - 345
.7 lb	5/32 - 3.96	2 II In conjunction with vehicle metal	9mm 124gr FMJ 357Mag. 158gr JSP	1175 - 358 1395 - 381
.8 lb	3/16 - 4.76	1 & 2 II Stand alone	9mm 124gr FMJ 357Mag. 158gr JSP	1175 - 358 1395 - 381
.8 lb	3/16 - 4.76	1, 2, 3 & 6 IIIA In conjunction with vehicle metal	44 Mag. 240gr SWC 9mm 124gr FMJ	1400 - 426 1400 - 426
1.1 lb	7/32 - 5.55	1, 2, 3 & 6 IIIA Stand alone	44 Mag. 240gr SWC 9mm 124gr FMJ	1400 - 426 1400 - 426

## Rubber coated aramid panel

Rubber coated aramid panel, although these panels do not have thermo formable properties (ability to bend and form into different shapes by applying heat) as non-rubber coated aramid panels do. Black Jack panels are more flexible than aramid panels and provide great weather resistance.

**Product Advantages:** BlackJack is designed with manufacturing requirements for weight, cost, flexibility and performance in mind. Ease of cutting and installation reduces overall cost of the finished product.



### **BLACKJACK** *Flexible Aramid Ballistic Panels*

Weight per Sq.Ft.	Nominal Thickness in (mm)	Ballistic Specification Data Sheet		
		UL - 752 Rev.9 NIJ 0108.01 Levels	Weapon & Bullet Description	Impact Velocity ft/sec (m/sec)
.6 lb	5/32 - 3.96	1 IIA In conjunction with vehicle metal	9mm 124gr FMJ 357Mag. 158gr JSP	1114 - 334 1280 - 345
.7 lb	5/32 - 3.96	2 II In conjunction with vehicle metal	9mm 124gr FMJ 357Mag. 158gr JSP	1175 - 358 1395 - 381
.8 lb	3/16 - 4.76	1 & 2 II Stand alone	9mm 124gr FMJ 357Mag. 158gr JSP	1175 - 358 1395 - 381
.8 lb	3/16 - 4.76	1, 2, 3 & 6 IIIA In conjunction with vehicle metal	44 Mag. 240gr SWC 9mm 124gr FMJ	1400 - 426 1400 - 426
1.1 lb	7/32 - 5.55	1, 2, 3 & 6 IIIA Stand alone	44 Mag. 240gr SWC 9mm 124gr FMJ	1400 - 426 1400 - 426

## Spectra.

Alliedsignal **Spectra**® shield is one of the strongest, lightest man made fibers. Spectra® pound-for-pound is 10 times stronger than steel, 40 percent stronger than aramids and stronger and lighter than virtually every other commercial high modulus panel. It floats, resists chemicals and water, and exhibits superior fiber-to-fiber abrasion. It has excellent vibration dampening, flex fatigue and internal fiber-friction characteristics.

**Spectra**® fiber's outstanding visco-elastic properties means that the faster and harder the impact from a bullet, the stronger these fibers become, making them ideal for hard and soft body armor.

**Spectra**® fibers are used in numerous applications, including police and military ballistic vests; helmets and armored vehicles; sailcloth; fishing lines; marine cordage and lifting slings; and cut resistant gloves and safety apparel



## Dyneema

Dyneema is a polyethylene produced by DSM's patented gel spinning process. Dyneema is 15 times stronger than steel on a weight-for-weight basis, twice as strong as aramid fiber.

Dyneema UD (Dyneema based unidirectional) sheets are for high-velocity ballistic protection. Dyneema is light enough to float on water, exhibits superior resistance to chemicals, water and UV light.

Protect your most important assets, your people.

AAM manufactures light weight ballistic panels used in architectural armor systems. These same systems are used for industrial protection in the workplace. These systems provide protection to individuals from bullets, projectiles and fragmentations. The panels can be placed inside walls, doors, desks or any place protection may be necessary. Our panels provide excellent protection against machinery explosions, breaking or malfunctions.

Our armor systems are some of the lightest weight armor systems in existence. This allows full mobility behind a desk or podium and doesn't add hundreds or thousands of pounds in extra weight to floors of buildings not designed to handle the extra load. The armor systems have and are currently being used behind Judges benches, speakers podiums and even entire offices. Our panels can be cut and installed with little effort to provide maximum protection to the individuals.

AAM's armor systems are all non-ricochet so the products actually catch the bullet or projectile and does not offer a threat to other individuals or innocent bystanders.

Applications for our architectural armor would be as follows:

- Judges Bench armor protection
- Speakers podium armor protection
- Executive Office protection armor systems
- Executive Desks
- home of people protecting themselves and families
- Armored Guard Booths and Sky Lifts for Border Patrol
- Ticket Booths
- Cash Booth
- Armored Doors or Doorways

ArmorShield14, is certified in accordance's below by an independent lab.

**H.P. White Laboratory Inc.**

- **U.S Department of Transportation, Federal Aviation Administration  
Advisory Circular No. 25.795-2, FLIGHTDECK PENETRATION  
RESISTANCE** dated January 10, 2002
- **NIJ Level IIIA National Institute of Justice**

Testing was conducted in accordance with the provisions of FAA Advisory Circular Number 25.795-2, dated January 10, 2002, using calibers .44 Magnum, 240 grain, JHP and 9mm Luger, 124 grain, FMJ ammunition. The test samples were rigidly fixtured on an indoor range 16.4 feet from the muzzle of a test barrel to produce zero

degree obliquity impacts. Photoelectric lumiline screens were positioned at 6.5 and 11.5 feet which, in conjunction with the elapsed time counters (chronographs), were used to compute projectile velocities 9.0 feet forward of the muzzle. Penetrations were determined by visual examination of a 0.020 inch thickness alloy 2024T3 aluminum witness panel positioned 6.0 inches behind, and parallel to, the test samples. Table I presents a summary of the attached data records.

TABLE I. SUMMARY OF RESULTS

Test Sample		Ballistic Threat					Penetration
Number	Weight (lb)	Obliquity (Degrees)	Caliber	Shots	Velocity		
					Maximum	Minimum	
HPW-1	1.42	0	.44 Mag	4	1446	1421	0
		30	.44 Mag	2	1442	1425	0
HPW-2	1.43	0	9 mm	4	1478	1433	0
		30	9 mm	2	1441	1436	0

Based on the data presented in Table I, the test samples submitted for testing SATISFIED the ballistics resistance requirements of FAA Advisory Circular Number 25.795-2, dated 10 January 2002.

ArmorShiled, a high performance aramid panel, is a new armor system used to retrofit doors and ceilings of VIP transport vehicles as well as aircraft, trains and vessels.

- Abrasion resistant
- Lightweight
- Thermoformable
- Flame retardant
- Moisture resistant
- Non static
- Easily installed and removed
- Easy to process and handle