

DuPont™

**KEVLAR®**

**KEVLAR® CORRECTIONAL™:  
PUNCTURE-RESISTANT TECHNOLOGY  
ON THE CUTTING EDGE**



*The miracles of science®*

# CORRECTIONS & KEVLAR

## Protection that's as tough as your job

According to a recent Bureau of Justice statistics study, corrections officers have the second most dangerous job in the United States. That should be no surprise, considering that the correctional population has been steadily rising over the last 10 years and that more than one-half of today's prison population is composed of violent offenders. Because corrections officers work in one of the most dangerous environments imaginable, and the threats they face are unique to that environment, DuPont believes their protection should be, too.

## Designed specifically for corrections officers

Personal body armor designed for law enforcement officers and military personnel protects against ballistic threats and will not stop handmade weapons like shanks and shivs typically found in prisons. New DuPont™ KEVLAR® CORRECTIONAL™ technology helps provide the outstanding puncture- and slash-resistant protection corrections officers need. This innovative technology also helps manufacturers design personal body armor that is soft and comfortable enough to wear all day long. And, vests made with KEVLAR® CORRECTIONAL™ are concealable, breathable, flexible and contour with the body, so they move with – not against – the wearer. As a result, corrections officers enjoy increased freedom of movement and mobility on the job, which can enhance their confidence and survivability when confronted by a violent inmate.

## State-of-the-art technology

DuPont's ongoing commitment to provide technology solutions that first anticipate – then meet – the needs of its customers led to the development of KEVLAR® CORRECTIONAL™, a new KEVLAR® fiber that is four times thinner than typical ballistic fibers (for an ultra-dense weave) and five times stronger than steel on an equal weight basis. Personal body armor made with this innovative technology uses this unique, superfine fiber. It is woven so tightly together, that when struck by sharp, handmade instruments, such as spikes, awls or shanks, the fiber absorbs and dissipates the energy of the puncture or penetration.

### Technical Performance of KEVLAR® CORRECTIONAL™

Before test



After test



It's the most comfortable, lightweight solution for corrections officer safety protection

## IT'S QUITE A COMBINATION





# VLAR®



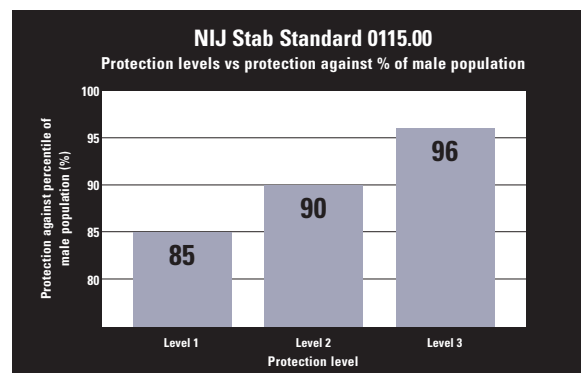
## Protective, wearable, versatile and a good investment

Personal body armor made with KEVLAR® CORRECTIONAL™ technology provides:

- Protection – it is specifically designed to help protect corrections officers against spikes, shanks, shivs and other handmade weapons typically found in corrections facilities. It also meets all NIJ threat levels.
- Wearability – KEVLAR® CORRECTIONAL™ technology is comfortable, daily wearable protection. It is designed to be thin, light, breathable, concealable and flexible so the vest works with corrections officers, not against them.
- Versatility – Vests of KEVLAR® CORRECTIONAL™ can be designed for “multi-threat” protection (stab, ballistic and blunt trauma).
- Good investment – the physical, emotional and psychological costs related to corrections officers’ injuries take a far greater toll on corrections officers, their facilities and their families than the price of protection. Because of the exceptional and unique protection it provides, KEVLAR® CORRECTIONAL™ is a sound investment in the short term and in the long run.

## Passes NIJ Stab Standard 0115.00

In September 2002, the National Institute of Justice (NIJ) developed a new standard for testing the stab resistance of personal body armor. One of the protection classes under NIJ Stab Standard 0115.00 is referred to as the “spike” class and covers threats that may be encountered in corrections facilities. Within the spike class, three levels of protection are classified. The lowest protection level, Level 1, corresponds to protection against about 85% of the male population. Level 2 corresponds to protection against about 90% of the population. Level 3 – the highest protection level – corresponds to protection against 96% of the population. Vests of KEVLAR® CORRECTIONAL™ are the first all-fabric, flexible and lightweight systems to pass NIJ Stab Standard 0115.00 at all protection levels.



**Thinness + light weight = comfortable protection**

The typical weight and thickness of personal body armor made of KEVLAR® CORRECTIONAL™ technology, which meets all NIJ protection levels against spike threats, is illustrated below:

Performance Parameters of KEVLAR® CORRECTIONAL™		
NIJ Spike Stab Level	Typical Areal Density, psf	Typical Thickness, inches
1	≤ 0.40	≤ 0.12
2	≤ 0.52	≤ 0.15
3	≤ 0.70	≤ 0.20

**The only vest that saves lives is the one that is worn**

Many injuries sustained by corrections officers are the result of stab attacks inflicted by violent inmates. Because vests made with KEVLAR® CORRECTIONAL™

are specifically designed to protect against these types of attacks, those employed in this country's second most dangerous profession have what they need to stay protected on the job. But "having what they need" is only part of what keeps corrections officers safe. The other part is making sure they wear their personal body armor all day long (almost 3,000 officers in the criminal justice community have been saved from serious and life-threatening injuries because they wore their personal protection). Since vests made with new KEVLAR® CORRECTIONAL™ technology are lightweight, breathable, and comfortable enough to wear for the entire shift, corrections officers can leave the "big house" and go home safely to their house every day.

For more information about KEVLAR® CORRECTIONAL™, please call DuPont at 1-800-4-KEVLAR®, go to [www.kevlar.com](http://www.kevlar.com), or contact your local distributor.

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**Product safety information is available upon request.**  
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