



Enhanced
Combat
Performance

SKJOLD™

BODY ARMOR SYSTEM



What is SKJOLD

SKJOLD™ is the Scandinavian word for shield, dating back to the Viking age when it referred to “a split piece of wood”.

When the Vikings set out to fight, the shield was their most important defensive weapon and a loyal companion. The shields were crafted out of wood and covered in leather to enhance the wooden material against spears, axes, or swords. Now, at the modern battlefield, the shields are replaced by hard ballistic plates, such as our ballistic plates. Today's SKJOLD™ are developed based on research and testing, with the best quality materials to ensure the highest levels of protection. However, some things have not changed since the Vikings set to battle; the shield is still a loyal companion to any soldier.





NFM®
GROUP

NFM Group **develop, design, and produce** protective equipment enabling the user to deploy her or his full capacity during combat, while staying protected.

Through **innovation** we strive to **protect** the individual from **man-made** and **natural threats**, regardless of location and climatic conditions.

Founded in 1996 by Norwegian ex-soldiers, NFM is today a **globally recognized** company rooted in Scandinavian craftsmanship and heritage.

NFM has a workforce of more than **1000 employees** with over 30 different nationalities across six **different countries** in Europe.



Innovation Through Excellence

CENTERS OF EXCELLENCE

At NFM, safety and well-being are our top priorities. We offer comprehensive protection systems like GARM™ Combat Clothing, THOR™ Load Bearing, SKJOLD™ Body Armor, and HJELM™ Combat Helmets.

Our excellence shows in our lightweight, advanced gear, made possible by our Europe-based Centres of Excellence, hubs for innovation and R&D.

OUR CORE VALUES

INNOVATION

Innovation drives our competitive edge. We foster collaboration and idea-sharing, with a structured approach to testing and knowledge sharing.

COMPETENCE

Our employees are experts in their fields. We prioritize personal and professional development to elevate our organizational competence.

HONESTY

We're transparent with clients, setting realistic goals and respecting confidentiality. We collaborate closely to maximize results.

TRUST

We work diligently to ensure both internal and external compliance with ethical guidelines in finance, operations, and environment.



STRATEGIC RESEARCH AND DEVELOPMENT

Norway, Germany, Poland



PRODUCTION AND SUPPLY CHAIN MANAGEMENT

Poland, Germany, Bulgaria



TACTICAL TEXTILES AND CLOTHING CONCEPTS

Poland, Germany



STRATEGIC MARKET PRESENCE

Norway, Sweden, Germany, France, Poland

Company Capabilities

Innovation is an operational must at NFM. With 80+ international R&D experts in Norway, Poland, and Germany, we aspire to set new industry standards.

IN-HOUSE TESTING

Our multi-country in-house testing facilities feature top-tier labs for ballistics, textiles, and composites. This enables fast, controlled development, optimizing gear for weight, protection, and comfort.

USER-CENTRIC INNOVATION

Our design involves end-users, engineers, and designers to create gear that aligns with natural behaviours in high-stakes situations. Partnerships with European Defence Fund projects and Norwegian Defence Research Establishment entities highlight our future-ready commitment.

QUALITY AND VERIFICATION

Quality is non-negotiable. We partner with leading European labs for external verification, and our internal labs ensure meticulous quality control. We adhere to global quality and environmental standards for consistent, traceable products.

OPERATIONAL AGILITY

Strategically located state-of-the-art production facilities across Europe enable quick ramp-ups and flexible deliveries. Our capabilities extend to laser cutting, automated sewing machines, lamination, and robotics, making us a reliable, global partner in protective gear.

PIONEERING TEXTILE INNOVATION WITH HEXONIA

Our Germany-based Hexonia leads in Europe's textile industry with advanced knitting tech. Specializing in seamless and ballistic knitted products, Hexonia's state-of-the-art labs and diverse knitting machines guarantee unmatched quality and innovation.



FULL SPECTRUM PROTECTION

Our vision goes beyond mere protection. We aim to shield from both man-made and natural threats in any location or climate. That's why we offer Full Spectrum Protection—a modular, scalable suite of gear for today's police and military. This system enhances comfort and agility, tailored to fit all body types, ensuring optimal fit for both genders. Our goal is lightweight, comfortable gear for continuous, unbroken protection in any operational context.

HJELM™ Helmet System

The HJELM™ Combat Helmet System combines lightweight design with advanced electronics integration and robust fragment protection. Tailored for adaptability, the system enhances mission optimization and situational awareness, all while offering unparalleled comfort and stability. Available in both 3rd and 4th Generation models, it's the ultimate choice for modern military and police units.

THOR™ Load Bearing System

THOR™ load bearing gear provides top-notch functionality and mobility. It's modular, adaptable to your mission and protection needs, and crafted with durable, comfortable, fire-resistant materials. It also integrates seamlessly with GARM™ Combat Clothing and SKJOLD™ Body Armor for optimal end-user performance and safety.

SKJOLD™ Body Armor System

SKJOLD™ delivers a complete spectrum of ballistic protection, from soft panels to advanced hard plates. Our multi-curve design accommodates all body types, male and female, enhancing fit and vital organ protection. SKJOLD™ plates are lightweight, increased comfort, mobility, and versatility for diverse roles and threats.

GARM™ Combat Clothing System

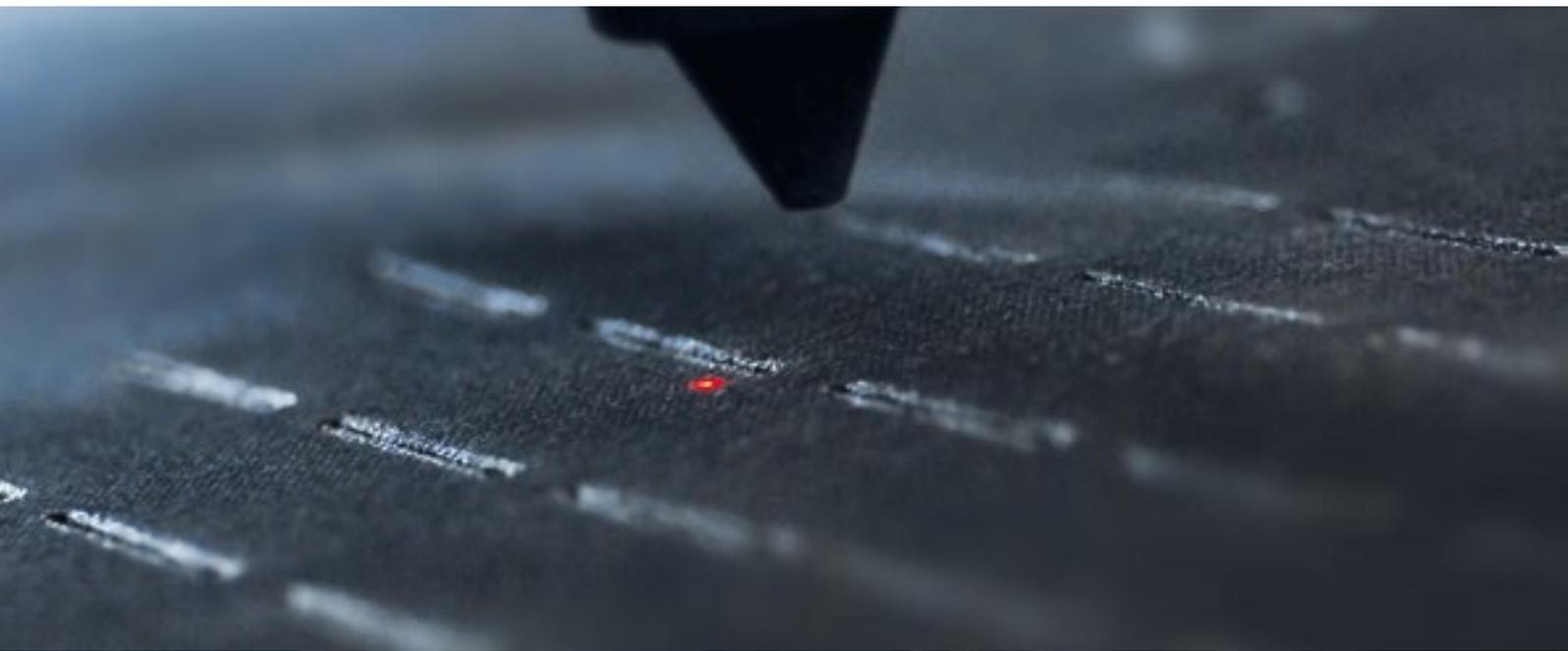
GARM™ is an innovative combat clothing system, which incorporates a complete line of combat garments from underwear to outerwear, together comprising the unique layering system. All design aspects of the system have been carefully implemented from end-user feedback with the aim of reducing weight while improving the durability, protection, and compressibility of every item.

FSPTM
Full Spectrum Protection





NFM designs, produces and supplies personal ballistic protection.

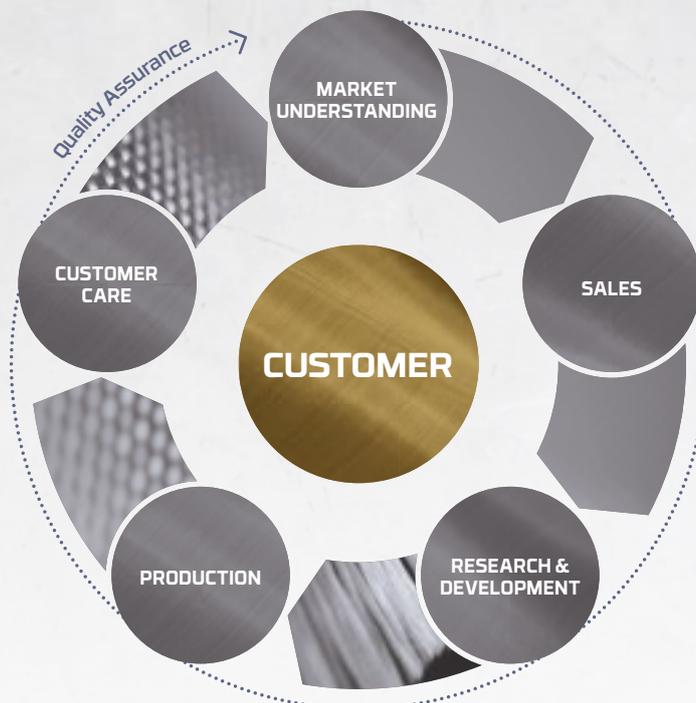


End-to-End Capabilities

Collaboration is the foundation of NFM's approach when managing the soldier integration system. Our system segment specialists provide a continual review and development process, offering expert advice, often extending the boundaries of what is possible and exceeding client pre-conceptions.

NFM's partnership extends beyond product delivery and aims to add value to both logistic support and lifecycle management with the end user benefits as the core.

NFM's expert ballistic department designs and produces the entire range of ballistic protection; from soft ballistic panels, hard ballistic plates, stab and spike to blunt and trauma protection. This unique capacity enables the optimization of the ballistic package in terms of weight and performance. The NFM in-house ballistic test laboratory enables immediate performance verification of all new developments, creating a controlled and rapid speed of development.





Protecting the soldier against operational threats regardless of environmental constraints.

RAPID TEMPERATURE CHANGE



RAPID PRESSURE CHANGE



NON-BALLISTIC IMPACT



Reliability



Quality is at the center of our corporate philosophy. We are certified with PN-EN ISO 9001:2015-10 and PN-EN ISO 14001:2015-09 and PN-N-19001:2006. NFM offers full traceability of critical raw materials and processes to ensure order-to-order stability. Our raw materials are tested thoroughly, using well defined testing procedures.

Our internal labs allow us to test both ballistics and textiles during development whilst external labs are used for test reports and certification of products. Extensive cooperation with our partners and incoming quality control ensures raw material quality. Quality related KPIs are continuously measured and new quality objectives are defined each year, in order to constantly improve our processes.

NFM has technology at its core; this longstanding principle has led to the development of innovative technologies which form the building blocks of SKJOLD™. Our patented technology forms the basis of the composite armor plates. It consists of a vacuum consolidation method that eliminates the encapsulated air combined with an environmentally friendly moulding process. This ensures that the fibre composites which reinforce the ceramic core always conform and support the ceramic, keeping it in a compressive state and maximising performance.

When a soldier wears a SKJOLD™ body armor system, he can be confident that it is going to protect him against operational threats. We have implemented the necessary processes in the research, production, quality assurance and life cycle management, as well as collaboration with clients, ensuring that the SKJOLD™ system saves lives.

Our experts are available to advise you on best solutions matching your needs.



Collaboration with clients allows us to expand our technological capabilities.

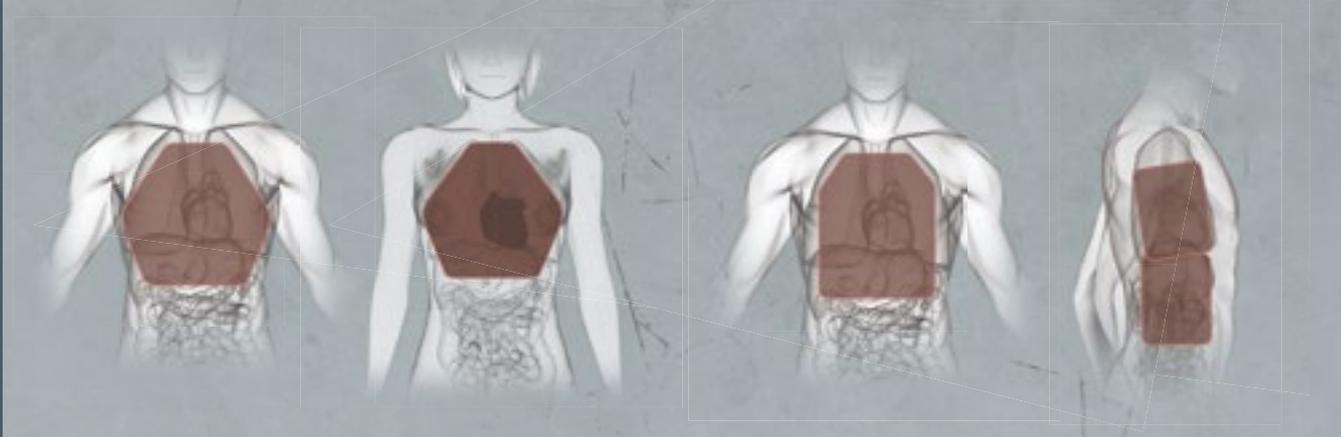


HEXA shape protects 46° of frontal arc
 Classic shape protects 36° of frontal arc

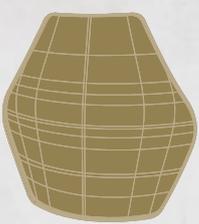
WIDER ANGLE PROTECTION

Our aim is the lightest, most comfortable and ergonomic system.

HARD BALLISTICS



HEXA plate



Size	Dimensions	Area of coverage
H1	27.5x26.0 cm 10.8x10.2 in	560 sq.cm 0.60 sq.ft
H2	29.0x28.5 cm 11.4x11.2 in	638 sq.cm 0.69 sq.ft
H3	30.0x28.5 cm 11.81x11.22 in	707 sq.cm 0.76 sq.ft
H4	31.0x30.0 cm 12.20x11.81 in	758 sq.cm 0.82 sq.ft
H5	32.0x31.5 cm 12.60x12.40 in	832 sq.cm 0.90 sq.ft

- ★ New revolutionary shape
- ★ Superior comfort for female front torso
- ★ 10° wider angle protection
- ★ Improved ergonomics
- ★ Improved freedom of movement
- ★ Extended range of sizes

TORSO plate



Size	Dimensions	Area of coverage
T3	21.0x26.0 cm 8.27x10.23 in	533 sq.cm 0.57 sq.ft
T4	23.0x30.0 cm 9.06x11.81 in	640 sq.cm 0.69 sq.ft
T5	25.0x33.0 cm 9.8x13.0 in	751 sq.cm 0.81 sq.ft
T6	27.0x35.0 cm 10.6x13.8 in	896 sq.cm 0.96 sq.ft
TN4	25.0x30.0 cm 9.8x11.8 in	680 sq.cm 0.73 sq.ft

- ★ Classic SAPI shape
- ★ Excellent ergonomics
- ★ Freedom of movement
- ★ Extended range of sizes

SIDE plate



Size	Dimensions	Area of coverage
S3	10.0x15.0 cm 3.94x5.91 in	145 sq.cm 0.16 sq.ft
S4	12.5x17.5 cm 4.92x6.89 in	215 sq.cm 0.23 sq.ft
SQ4	15.0x15.0 cm 5.91x5.91 in	220 sq.cm 0.24 sq.ft
S5	15.0x20.0 cm 5.91x7.87 in	295 sq.cm 0.32 sq.ft

- ★ Extends protected area
- ★ Does not affect mobility
- ★ Suitable for upper arm, torso side or thigh protection
- ★ Extended range of sizes

Comfort



SOFT BALLISTICS

We understand that each individual soldier has a different physical build, but what they all have in common is the desire for comfort and mobility. We aim to provide our clients with the lightest, most comfortable and ergonomical system on the market.

Optimizing comfort when the different elements of THOR™, GARM™, HJELM™ and SKJOLD™ are working together is always a consideration when ballistic protection is at the heart of the system. We deliver the lightest ballistic protection, contributing to an overall reduction in weight of the system whilst also minimizing its volume.

From our soft ballistics vest to our flagship hard ballistics HEXA armor, SKJOLD™ systems provides the soldier with maximum protection whilst simultaneously reducing weight and bulkiness. A combination of both soft and hard armor will give added protection, whilst separately they can combat different threats.

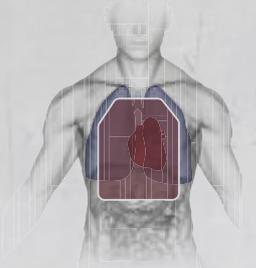
NFM enables lethality and mobility by providing sustainability.



NFM enhance combat efficiency and mobility through durable gear.



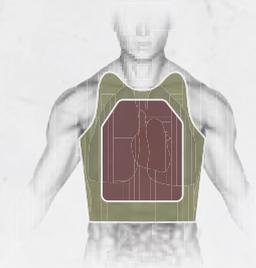
SA



Stand Alone (SA)

A stand alone configuration can be used when the user needs to be as light as possible. Protection against rifle threats is provided to the areas around the vital organs.

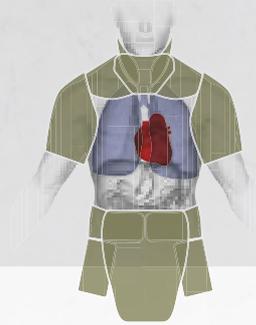
ICW



In Conjunction With (ICW)

An ICW solution provides a combination of protection against both rifle and fragmentation threats. This also enables the ability to adapt the level of protection from fragment/pistol threat to rifle threat.

SUP



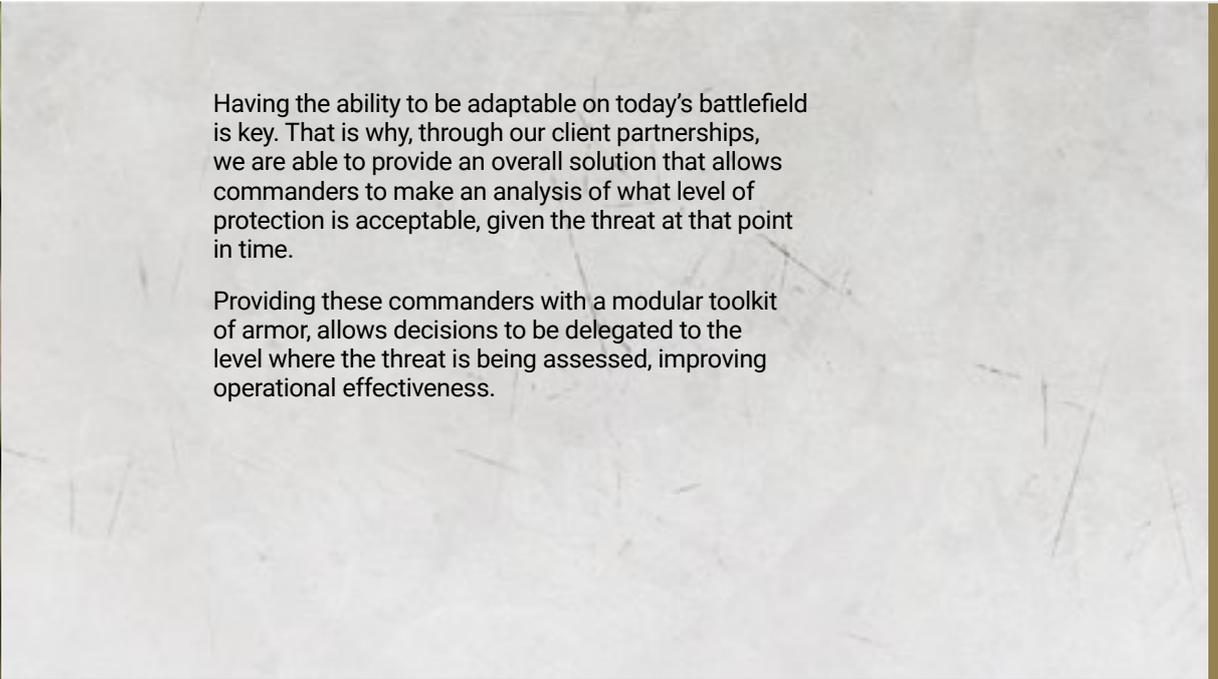
Supplementary (SUP)

Additional supplementary add-ons are normally added when there is an increased threat of fragmentation. This can be used with both SA and ICW solutions.

Adaptability

Having the ability to be adaptable on today's battlefield is key. That is why, through our client partnerships, we are able to provide an overall solution that allows commanders to make an analysis of what level of protection is acceptable, given the threat at that point in time.

Providing these commanders with a modular toolkit of armor, allows decisions to be delegated to the level where the threat is being assessed, improving operational effectiveness.





NFM has developed a portfolio of products to address different standards and requirements, which we can offer to suit every need and budget.



Our internal labs allow us to test both ballistics and textiles during development whilst external labs are used for test reports and certification of products.

Soft Ballistics Performance

Prior to selecting any kind of SKJOLD™ body armor system it is of vital importance to consider and appreciate the relationships between some key performance indicators.

Areal weight – a measure of weight per square metre. The basic product weight always needs to be considered with respect to the protected surface.

Protection – test standards, selected ammunition and velocity will determine the level of protection.

Thickness – designing thin solutions whilst maintaining flexibility adds to performance.

Price – lighter solutions will generally add to the overall price.

The ideal solution is to have a maximum level of protection whilst reducing thickness, areal weight and price. Inevitably, there are compromises to be made but our advanced technology and materials ensure that we are consistently delivering optimum solutions.



Advantages of NFM's Soft Ballistic Solutions



Vast experience of providing competitive solutions according to European standards



Ability to provide tailor-made solutions according to local standards



Durability of lifecycle of cover



Testing of ballistic covers ensuring waterproof solution, 10m H₂O column



Ability to sustain extensive hydrolysis testing



Wide range of solutions with external certifications



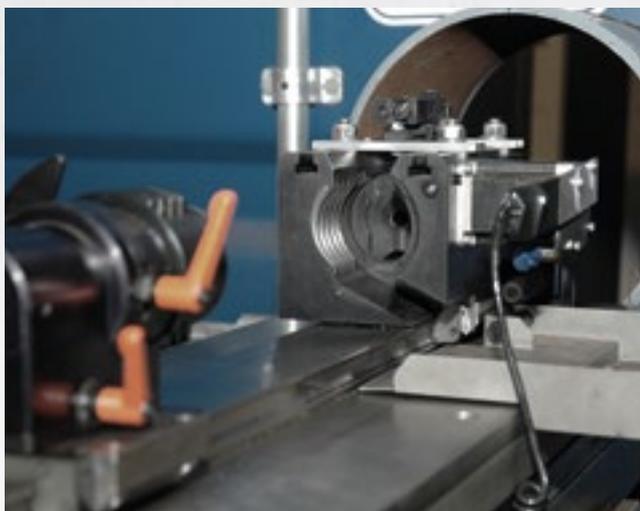
100% batch testing of water proofing



In-house capability for NIJ06 tumbler testing



We are looking at optimizing protection and multi-shot/edge protection whilst reducing overall weight and price.



Hard Ballistics Performance

When dealing with hard ballistics (HB) we have several variables to consider.

Weight – a measure of weight related to protective surface.

Performance – test standards, selected ammunition and velocity will determine the level of protection.

Thickness – affects the ergonomics of the soldier.

Price – lighter solutions will generally add to the overall price.

The ceramic cores are encapsulated into an envelope of high performing fiberglass, with a PET matrix which helps to control the crack pattern and provides superior multi-hit capabilities.

SKJOLD™ body armor plates also have a significant area of active protection. Most of the standards for body armor classification define fair-hit as far as 50-75mm from the edge. Plates produced by NFM can provide effective protection as close as 13 mm from the edge.



Advantages of NFM's Hard Ballistic Solutions



Pressure change resistant



Multi hit capacity



Waterproof



Lightweight



Temperature resistant



Recyclable



Fragment protection



Uniform performance



Ergonomic shape



Edge shot capacity



Low profile



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