



Fabric Range

Kozane[®] Pro
Kozane[®] Extreme

Kozane[®] Invicta
Kozane[®] Supreme

GRANBERG®

FEARLESS PERFORMANCE

With more than 61 years of experience in protecting workers in challenging Norwegian climate conditions, Granberg has been producing and selling work gloves in many parts of the world - a proud and well-established company with a worldwide client base and a continued focus on product design and product development for customer satisfaction. Since 1961, our mission has been to offer the correct hand protection through customer proximity, responsiveness, knowledge, and technological innovation. Today, we have a selection of over 250 types of safety gloves, designed to protect

workers in various industries, including food processing and medical fields. We have helped inspire and provide protection in workplaces in the manufacturing industry, in the private sector, and as well as in the public sector. Our products are engineered, designed, and manufactured using the latest technology and the most advanced materials available. This has made it possible to recruit the best talents and develop the strongest brands in the industry.



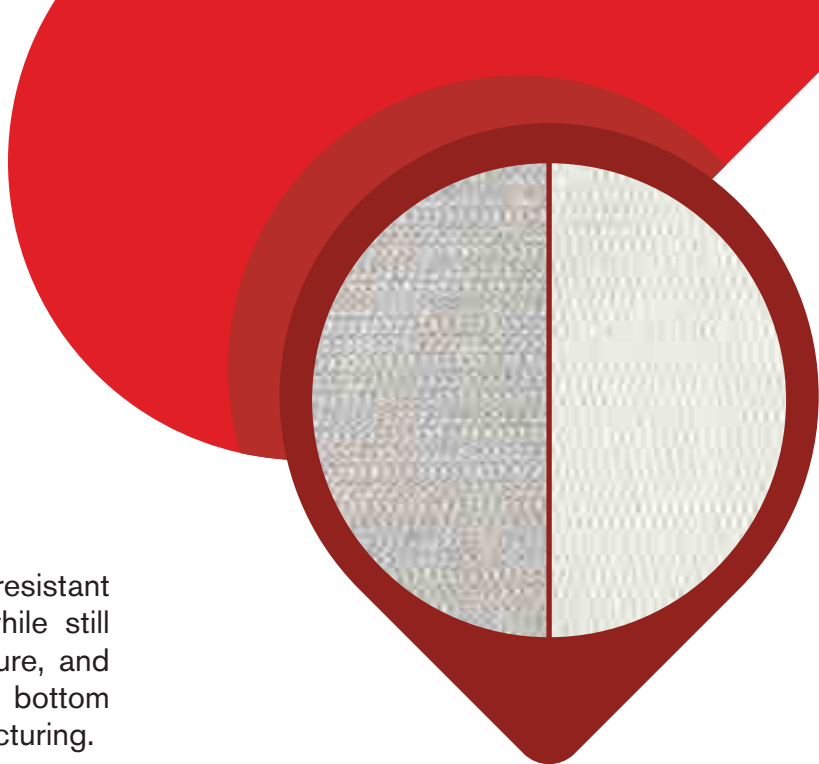
Our motivation to lead the industry forward, and thirst to find unconventional solutions and make a positive impact on the world around us, has led us to establishing a dedicated research and development centre in 2017. Thanks to a carefully selected team of textile specialists and engineers, we have been creating unique high-performance fabrics, breaking barriers in the protective fabrics industry, and expanding the company's interests outside the glove sector. The Kozane® range of high-performance cut-resistant and abrasion-resistant

fabrics offers industry-leading protection wherever they are needed, delivering flexible, lightweight, and breathable protection that truly performs. Their unique composition and outstanding performance make them suitable for a wide variety of applications, including personal protective equipment (PPE) for the military, security and law enforcement, industry, health and social care, special education, extreme sports, and more.

Kozane[®] Pro

Art. No. 500.3503






Kozane[®] Pro is our most lightweight, cut-resistant fabric with an innovative 4-way stretch, while still offering high levels of cut, abrasion, puncture, and tear resistance. Breathable and with a soft bottom layer, designed primarily for garment manufacturing.



EN 388: 2016	Level	Ratings
Abrasion	2	1,890 cycles
Tear resistance	4	301N
Puncture resistance	3	168N
Cut resistance	F	33.1

ANSI ASTM F2992-15	A6	3,743g
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Weight/surface density	345 g/m2
Roll width	1.98m
Roll length	18m
Colour	White or Black

Safety and care instructions	    
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Patent WO 2018/097737 A1

Potential applications:

- ✓ Cut and slash-resistant clothing
- ✓ Cut-resistant lining
- ✓ Anti-theft bags, luggage, and upholstery
- ✓ Motorcycle, outdoor, and extreme sports apparel (speed skating, hiking, ice hockey, speed boating, etc.)
- ✓ Cut resistant footwear

Recommended Sectors:

- ✓ Sports and Leisure
- ✓ Glass and Metal fabrication
- ✓ Car Manufacturing
- ✓ Security




Kozane® Extreme

Art. No. 500.3102

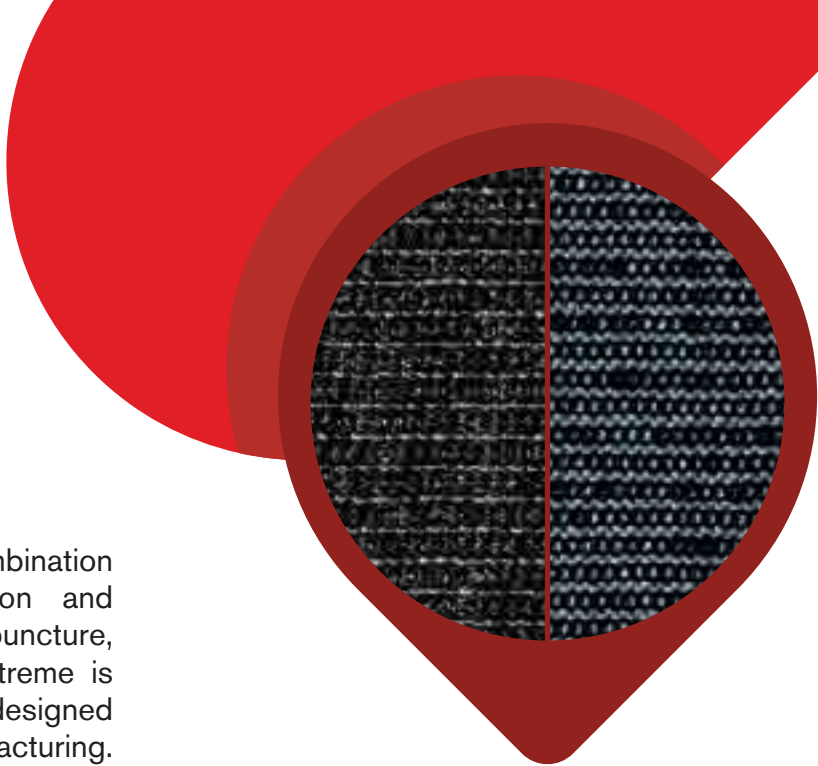
Kozane® Extreme offers the best combination between outstanding levels of protection and wearability. Featuring high levels of cut, puncture, abrasion, and tear resistance, Kozane® Extreme is breathable, with a soft bottom layer, and designed primarily for garment and apparel manufacturing. Personal protective clothing manufactured using Kozane® Extreme can effectively prevent serious injuries from cuts and lacerations caused by sharp tools, blades, and materials.

EN 388: 2016	Level	Ratings
Abrasion	3	6,000 cycles
Tear resistance	4	281N
Puncture resistance	4	216N
Cut resistance	F	50.5N

ANSI ASTM F2992-15	A8	5,847g
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Weight/surface density	375 g/m2
Roll width	2.05m
Roll length	20m
Colour	Black or White
Safety and care instructions	 <p>Note: tumble dry at 40°C</p>

Patent WO 2018/097737 A1



Potential applications:

- ✓ Cut and slash-resistant clothing
- ✓ Anti-theft bags, luggage and upholstery
- ✓ Motorcycle, outdoor and extreme sports apparel
- ✓ Cut resistant footwear

Recommended Sectors:

- ✓ Glass and Metal fabrication
- ✓ Car Manufacturing
- ✓ Security
- ✓ Sports and Leisure
- ✓ Mining
- ✓ Recycling
- ✓ Paper and Pulp



Kozane® Invicta


Art. No. 500.2019

Kozane® INVICTA features outstanding tear, puncture, and abrasion resistance, and it is our most durable fabric. Initially designed for tear-resistant garments for vulnerable patients and prisoners where traditional clothing and bedding may increase the risk of self-harm, and for motorcycle safety apparel due to its extremely high abrasion resistance. Its unique properties also make it suitable for a wide range of applications which require extreme durability, such as footwear or luggage manufacturing.

EN 388: 2016	Level	Ratings
Abrasion	4	>8,000 cycles
Tear resistance	4	408.2N
Puncture resistance	4	394N
Cut resistance	B	7.3N

Weight/surface density	470 g/m ²
Roll width	width 1.87m
Roll length	20
Colour	Black or Grey Marl

Safety and care instructions



Patent WO 2018/097737 A1

Potential applications:

- ✓ Tear-resistant (seclusion) clothing and bedding for mental health and prison/corrections
- ✓ Extremely durable footwear, luggage, upholstery
- ✓ Abrasion resistant protective motorcycle apparel and gear
- ✓ Reinforcements (i.e., knees and elbows) for puncture, tear, and abrasion resistance
- ✓ Bite and scratch resistant clothing for professionals in mental health and special education

Recommended Sectors:

- ✓ Sports and Leisure
- ✓ Healthcare and Social Care
- ✓ Prisons and Corrections
- ✓ Security/Army








Kozane[®] Supreme

Art. No. 500.1005

Kozane[®] Supreme reaches the highest possible cut resistance level according to the American standard ANSI ASTM F2992-15, an unprecedented ANSI A9 for a knitted fabric, previously only achieved by chain mail. Also offering high levels of puncture, abrasion, and tear resistance, Kozane[®] Supreme is suitable for manufacturing cut-resistant products across a variety of sectors.

EN 388: 2016	Level	Ratings
Abrasion	4	18,000 cycles
Tear resistance	4	373N
Puncture resistance	4	332N
Cut resistance	F	55.1N

ANSI ASTM F2992-15	A9	7,005g
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Weight/surface density	531 g/m ²
Roll width	2.05m
Roll length	20m
Colour	Black or White
Safety and care instructions	     <p>Note: tumble dry at 40°C</p>

Patent WO 2018/097737 A1

Potential applications:

- ✓ Cut and slash-resistant clothing
- ✓ Anti-theft bags, luggage, and upholstery
- ✓ Motorcycle, outdoor and extreme sports apparel
- ✓ Cut resistant footwear

Recommended Sectors:

- ✓ Glass and Metal fabrication
- ✓ Car Manufacturing
- ✓ Security
- ✓ Healthcare
- ✓ Sports and Leisure
- ✓ Mining
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