

# TENCATE Defender™ M

## EMERGENCY RESPONSE

The TenCate Defender™ M collection is a range of inherently heat- and flame-resistant fabrics.

**Thermal liner: CZ 760 – 130 g/m<sup>2</sup>**

## Military combat-uniform fabrics for firefighting applications

TenCate Defender™ M is a patented breakthrough flame-resistant fabric that helps to protect military personnel all over the world; from the USA-troops in Afghanistan and Iraq to the European military forces in Mali. This technology has been used for the development of an innovative new thermal liner for firefighter turnout gear.

**Evaporative cooling effect + heat stress reduction** – Breathable fabric, engineered with TenCate's Coolderm™-Technology, offering an evaporative cooling effect. Moves perspiration away from the body and spreads moisture for improved dissipation. Keeps the underlying skin cooler and drier; an important factor to contribute to the reduction of heat stress.

**Ease of movement** – The fabric is soft, flexible and light. Provides great ease of movement.

**Inherent-FR & inherent wicking; no chemicals/no finishes** – The fabric is inherently FR with inherently wicking properties, without the use of chemicals or finishes. These properties never wear nor wash out.

**Good durability** – Ripstop construction for a better strength, also after washing. Low thermal shrinkage and good pilling resistance.

Available in gold color and also in camouflage print.

These fabrics are made by TenCate Protective Fabrics, the largest supplier of FR fabrics in the world. Ask your garment supplier to use the advanced fabrics of TenCate in your turnout gear.



Technical data	TenCate Defender™ M thermal liner	Test method	Standard colour
Quality	CZ 760		 <p>Gold 35328</p> <p>The colour above is a standard colour and available with a minimum order length of 100 metres. The colour shown is of reference only.</p>
Width	160 cm (+2/-1 cm)	ISO 22198: 2006	
Weight	130 g/m <sup>2</sup> (± 5%)	ISO 3801: 1977	
Composition	Lenzing FR®/aramid/polyamide	ISO 1833: 1977	
Construction	Ripstop plain	ISO 3572: 1976	
Protection	Thermal liner for firefighting turnout gear		
Tensile strength	710 N x 710 N (-10%)	EN ISO 13934-1: 2013	
Dimensional change after 5 cleaning cycles ISO 6330, 6N: 2013, Procedure F	≤ ± 3%	EN ISO 5077: 2008	
Heat resistance 180°	≤ ± 5% shrinkage. No ignition, no melting	ISO 17493: 2000	
PPE* requirements			
Washing symbols			
<b>Certification</b>			<p><b>Optional</b></p> <p>Any camouflage pattern.</p>   <p>* Copyright symbols: NEN, Delft (Netherlands)</p>
	Firefighting	EN 469: 2006/A1	
	General requirements	EN ISO 13688: 2013	



**TenCate Protective Fabrics**

TenCate is the world's No. 1 producer of protective fabrics for the manufacturing of safety wear. We supply garment-makers with an extensive range of top-quality and technologically advanced fabrics.

Our fabrics become lifesaving garments for firefighters, industrial workers, military personnel and other professionals working under hazardous conditions in danger zones around the world.

We work closely with our customers, end-users, fibre and chemical manufacturers and independent laboratories. As a result, TenCate Protective Fabrics is the one source the world looks to for leadership in knowledge of materials, consistent product quality, and a proven commitment to service excellence.

TenCate is a trademark of Royal Ten Cate nv. Ten Cate Protect bv is a subsidiary of Royal Ten Cate nv.



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