

The TenCate Tecashield® collection is a range of inherently heat- and flame-resistant fabrics.

CQ 700 – 245 g/m² (Aralite™ NP)

Inherently heat- and flame-resistant fabric

Thermal barrier with thermal liner:

Thermal barrier: aramid (needle punched non-woven)

Thermal liner: meta-aramid

The TenCate Tecashield® - CQ.700 (Aralite™ NP) is a combination of an inherently heat- and flame-resistant non-woven thermal barrier with a woven thermal liner. With proven protection and outstanding comfort this fabric is the optimum solution.

The optimum solution – Suitable for application as the thermal barrier of turnout gear for firefighters – Complies with EN 469: 2005.

Outstanding comfort – Flexible lightweight thermal barrier (245 g/m²).

Premium thermal performance – Offers good thermal protection. This fabric balances insulative performance and heat stress relief.

Moisture management – Wickwell™ plus technology moves perspiration away from body, spreads moisture for improved dissipation and unmatched wickability.



Highly durable – Good pilling resistance.

Long-lasting looks – The fabric has been thoroughly tested for its protective properties and has also been submitted to an extensive range of washing and wearing tests at independent testing institutes.

Complete system - TenCate is able to supply all the components of the fire fighters turnout gear: outer shell, moisture barrier, thermal barrier, thermal liner, reinforcement and cuffs.



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Technical data	TenCate Tecashield®	Test method	Standard colour
Quality	CQ 700 (Aralite™ NP)		
Width	153 cm (± 2,5 cm)	ISO 3801: 1978	
Weight	245 g/m ² (± 5%)	ISO 3932: 1980	<p>The colour above is a standard colour and available with a minimum order length of 100 metres. The colour shown is a reference only.</p> <p>* Copyright symbols: NEN, Delft (Netherlands)</p> <p>** After pre-treatment (five wash/dry cycles according to EN ISO 6330: 2000. Procedure 2A (60°C) with tumble drying (Procedure E) (max. 70°C outlet temperature).</p> <p>*** As received</p>
Composition	Thermal barrier: aramid (needle punched non-woven) Thermal liner: meta-aramid		
Tear strength	108 N x 78 N	ISO 13937-1: 2000	
Tensile strength	815 N x 409 N	ISO 13934-1: 1999	
Martindale abrasion	37.000 (9 kPa)	ISO 12947-2: 2002	
Pilling	3 x 3	ISO 12945-1: 2000	
Protection	Thermal barrier for firefighters turnout gear		
PPE* requirements			
Domestic laundering			
Certification	 Firefighting	EN 469: 2005	

Summary of results EN 469: 2005							
Property	Test method	EN 469: 2005 requirements	Results obtained	PASS/level			
6.1 Flame spread	EN ISO 15025: 2002 Procedure A	EN 533 index 3: No flaming to edge - No hole formation - No flaming or molten debris - Mean afterflame ≤ 2s - Afterglow not to spread	EN 533 index 3: No flaming to edge - No hole formation - No flaming or molten debris - No afterflame - No afterglow	PASS**			
6.2 Heat transfer (flame)	EN 367: 1992	<table border="0"> <tr> <td><u>Level 1</u> HTI₂₄ ≥ 9,0 HTI₂₄ - HTI₁₂ ≥ 3,0</td> <td><u>Level 2</u> HTI₂₄ ≥ 13,0 HTI₂₄ - HTI₁₂ ≥ 4,0</td> </tr> </table>	<u>Level 1</u> HTI ₂₄ ≥ 9,0 HTI ₂₄ - HTI ₁₂ ≥ 3,0	<u>Level 2</u> HTI ₂₄ ≥ 13,0 HTI ₂₄ - HTI ₁₂ ≥ 4,0	<table border="0"> <tr> <td><u>Level 2</u> HTI₂₄ = 12,3 (based on lowest result) HTI₂₄ - HTI₁₂ = 3,8 (based on lowest result)</td> </tr> </table>	<u>Level 2</u> HTI ₂₄ = 12,3 (based on lowest result) HTI ₂₄ - HTI ₁₂ = 3,8 (based on lowest result)	Level 1**
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6.3 Heat transfer (radiation)	EN ISO 6942: 2002 Method B at 40kW/m ²	<table border="0"> <tr> <td><u>Level 1</u> RHTI₂₄ ≥ 10,0 RHTI₂₄ - RHTI₁₂ ≥ 3,0</td> <td><u>Level 2</u> RHTI₂₄ ≥ 18,0 RHTI₂₄ - RHTI₁₂ ≥ 4,0</td> </tr> </table>	<u>Level 1</u> RHTI ₂₄ ≥ 10,0 RHTI ₂₄ - RHTI ₁₂ ≥ 3,0	<u>Level 2</u> RHTI ₂₄ ≥ 18,0 RHTI ₂₄ - RHTI ₁₂ ≥ 4,0	<table border="0"> <tr> <td><u>Level 2</u> RHTI₂₄ = 17,0 (based on lowest result) RHTI₂₄ - HTI₁₂ = 6,5 (based on lowest result)</td> </tr> </table>	<u>Level 2</u> RHTI ₂₄ = 17,0 (based on lowest result) RHTI ₂₄ - HTI ₁₂ = 6,5 (based on lowest result)	Level 1**
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6.5 Heat resistance	ISO 17493: 2000 at 180 °C	Materials shall not ignite or melt Shrinkage ≤ 5%	Material did not ignite or melt. Max. Shrinkage: 0.3%	PASS***			
6.9 Dimensional change	ISO 5077: 2007	Max ± 3% (= shrinkage)	< 3%	PASS**			



Member of the E.T.S.A.

TenCate Protective Fabrics

TenCate Protective Fabrics consists of three companies: TenCate Protective Fabrics EMEA, TenCate Protective Fabrics Americas, TenCate Protective Fabrics Asia. We develop and produce the most comprehensive range of proven, high-performance fabrics used to make protective clothing.

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

Q1-2013 Please check our website for the latest product information.