

HSK COVERALL

WORKWEAR & SAFETY EQUIPMENT CATALOG



9800/8800 Series Coverall

Our workwear garments present to you a functional durable work protection solutions at the economical price. Using only **100% natural cotton fibers**, our workwear offers the most comfort for your every needs in the most demanding environments. These versatile and durable products meet our high standards for superior construction, and are check for fit, wear, comfort. Our functional series of coveralls are available in **lightweight or deluxe thread count**.

Product Features:

- Collar for neck protection
- Button down large chest pockets
- A total of six pockets for the lower torso
- Tool pocket on left sleeve, Box pockets on thighs
- Action pleats on knee regions and back of shoulders
- Elastic action waist for body movements
- Strategic bartack stitching on critical region
- Double Stitching
- Comes in lightweight 195gsm or Deluxe 280gsm
- Lightweight Cotton, 195gsm/m² are best suited for hydro-blasting, fitting, painting or general tasks.
- Heavyweight Cotton, 260gsm/m² performs well for blasting, welding, fabrication where durable is a necessity.

Colour Chart



9800R/8800R Series Coverall

This classic overall offers nine functional pockets and are best suited for Offshore, Shipbuilding or Ship repair yard where high visibility and safety are non – compromised. **With reflective strip 50mm across shoulders, arms & legs for high visibility**, our reflective workwear garments present to you a functional durable work protection solutions at the economical price.

Using only **100% natural cotton fibers**, our workwear offers the most comfort for your every needs in the most demanding environments. Our functional series of coveralls are available in **lightweight or deluxe thread count**.

Product Features:

- Collar for neck protection
- Button down large chest pockets
- A total of six pockets for the lower torso
- Tool pocket on left sleeve, Box pockets on thighs
- Loops for radio antenna on shoulder
- Action pleats on knee regions and back of shoulders
- Elastic action waist for body movements
- Strategic bartack stitching on critical region
- Double Stitching
- Reflective strip 50mm across shoulders, arms & legs for high visibility
- Comes in lightweight 195gsm or Deluxe 280gsm

Colour Chart



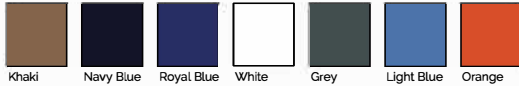
HSK Jackets

Usually worn over regular clothes to provide extra protection, our range of jackets are made from 100% natural cotton fibers and are suitable for all industries. Available in different designs, colours & weight, our versatile workwear offers the most comfort for your every needs in the most demanding environments.

HSK Double Protection Deluxe Zip Jacket

• 4800 – 245gsm/m2

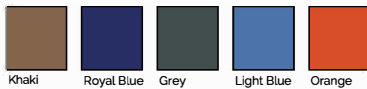
Colour Chart



HSK Double Protection Deluxe Zip Jacket (Reflective Series)

• 4800R – 245gsm/m2

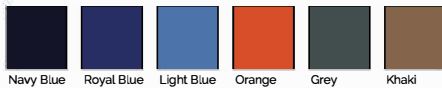
Colour Chart



HSK Lightweight Jacket (Button Fly)

• 5800 – 185gsm/m2

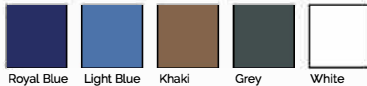
Colour Chart



HSK Deluxe Jacket (Zip Fly)

• 6800 / 6800R – 245gsm/m2

Colour Chart

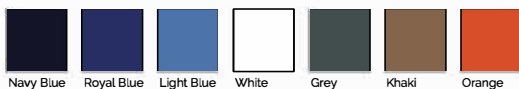


*Reflective series only available in WHITE

HSK Lightweight Zip Up Jacket

• 7800 – 185gsm/m2

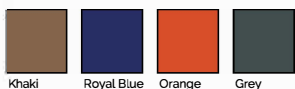
Colour Chart



HSK Lightweight Zip Up Jacket (Reflective Series)

• 7800R – 185gsm/m2

Colour Chart



HSK Work Pants

Our workpants are built tough with rugged, durable fabric that can make it through any work day. Anyone who owns them know that comfortable pants are an absolute necessity when on the job or in tough conditions. Made from 100% natural cotton fibers, our work pants are suitable for all industries such as shipbuilding, engineering, construction etc.

Product Features:

- Heavy weight Cotton Twill
- Weight: 270gsm +/-
- Breathable with durability
- 6 x fully functional work pockets
- Added padding for knee caps extending comfort and protection.
- Comfort fitting for flexibility



Orange



Royal Blue



Grey



White



Khaki



Navy Blue



Light Blue

WORKXWEAR FIRE SERIES



workXwear Fire series complies to EN ISO 11612, EN ISO 1149, NFPA 2112, NFPA 70E, Arc Flash protection etc. Available in both treated & inherent fabrics for maximum protection against flames, heats & burn injuries. "Whatever, Whenever, Wherever"

workXwear Fire Guard

100%
Made in Italy

K-Flame is Klopman's new range of inherently flame retardant fabrics, conceived to offer resistance to heat, flame and welding, as well as supplying antistatic and electric arc protection. The fundamental characteristics of the fabric ensure long-term durability, while its composition delivers maximum comfort and breathability even in the hottest environments and climates.

Klopman's K-Flame fabrics use Kermel®, an inherently flame-resistant fibre which combines non-flammability, comfort and durability. Our Range of FR Clothing are constructed from **flame resistant fabric and components** for superior protection against burn injuries.



Product Features:

- Flame Retardant 50mm reflective tape Nordic Style
- Inherent European fabric - Klopman
- HRC 2 rated (APTV : 8,4cal/cm2)
- Flame retardant brass zipper with Flame retardant tape
- Full Fledge collar for full protection
- Zipper pockets with flap for easy single handed usage
- Tool Pocket & Slot on sleeve
- Pleated Kneecap for swift action
- Easy identification for safety approval tagging
- Suitable for all sorts of offshore, oil & gas work



EN 1149-5



EN ISO 11612
A1 A2 B1 C1 F1



IEC 61482-2



workXwear Fire Armour

Flame Retardant Pyrovatex® treated Coveralls, maximum protection against flames and heats at minimum costs. **EN 1149 and EN ISO 11612 certified**, it provides durable and affordable protection for chemical, oil & gas, petrol chemical plants.

Our Range of FR Clothing are constructed from **flame resistant fabric and components** for superior protection against burn injuries. They are comfortable, light weight with inherent heat and flame resistant properties.

Product Features:

- Flame retardant 50mm Nordic style reflective tape for enhanced visibility
- Collar for addition neck / throat protection (optional of WorkXwear SPARTANZ)
- Pleated action back for ease of upper body movements
- Intelligent reinforced construction to major seams strategic bar tacks on crotch areas
- Two back pockets, two side pocket with Velcro fastening covers
- Radio loops on chest, Single tool pocket on sleeve
- World famous YKK two way Zip
- Guaranteed Protection for 50 washes & more



workXwear Fire Shield

workXwear Fire Shield Jacket

- Colours: Orange (with or without FR reflective tape), Navy Blue (c/w FR reflective tape), Red (c/w FR reflective tape)
- Sizes: S – 4 XL

workXwear Fire Shield Trousers

- Colours: Orange (with or without FR reflective tape), Navy Blue (c/w FR reflective tape), Red (c/w FR reflective tape)
- Sizes: S (28) , M(30) , L(32) , XL(34) , 2XL(36) , 3XL(38) , 4XL(40)



workXwear Safety Gloves

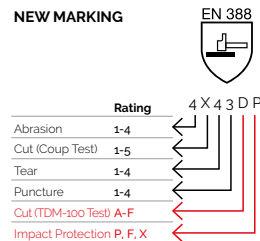
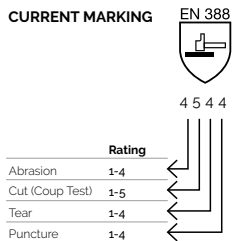


Construction

- Knitted Liner
45% High Performance Polyethylene, 12%Fiberglass, 5% Spandex, 38% Polyester
- Impact Protection 100% Thermal Plastic
- Rubber Palm Coating 100% Nitrile

Features

- 13 gauge
- High Visibility color
- Anti Cut Level D
- Impact TPR Protection (Grade P)
- Knitted for maximum breathability
- Adjustable cuffs



Brand / Model	workXwear Impact Free
Protection Level	EN 388 (2016) : (4.X.4.3. DP)
Abrasion Resistance	Level 4
Cut Resistance (Coup Test)	N.A.
Tear Resistance	Level 4
Puncture Resistance	Level 4
Cut Resistance (TDM-100 Test)	Grade D
Impact Protection	Grade P

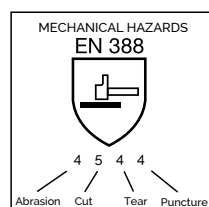


Construction

- Knitted Liner 45% High Performance Polyethylene, 12%Fiberglass, 15%Spandex, 28% Nylon
- Rubber Palm Coating with grip 100% Natural Latex

Features

- 13 gauge
- EN CUT Level 5 (EN 388:2003)
- Hard wearing durability coated latex
- Grip texture on palm for extreme grip
- Knitted for maximum breathability



Brand / Model	workXwear Rizcut 5
Protection Level	EN 388 (2003) : (4.5.4.4.)
Abrasion Resistance	Level 4
Cut Resistance	Level 5
Tear Resistance	Level 4
Puncture Resistance	Level 4

WORKXWEAR SAFETY FOOTWEAR

workXwear safety footwear were manufactured to be fit for all industrial usages. The materials used during the manufacturing process are of quality as we understand the importance of a sturdy safety shoes. All our safety footwears has a protective reinforcement in the toe which protects the foot from falling objects or compression, usually combined with a mid sole plate to protect against punctures from below.



Specifications

- Top Grain Leather
- Injection moulded for complete resistance to water penetration
- 200 Joules Impact steel Toecap
- Whole piece Steel mid-plate
- Slip & oil resistant
- Anti-Static in-soles padding
- Shock Absorbing heels outsole
- PU/PU Double density outsole for durability up to maximum of 120 degrees Celsius
- Cotton In-soles with air pockets for foot fatigue
- Soft Poly Mesh for Ankle flexibility.

workXwear Ligero Lightweight (Metal Free)



Component	workXwear Ligero low cut laced
Upper	FlyKnit Mesh (Black / Green)
Outsole	PU / PU outsole
Midsole	Kevlar Insert
Toecap	Composite Toecap NON METAL

workXwear Atlantis Comfort



Component	workXwear Atlantis Premium Comfort Low Cut Laced up Shoes
Upper	Top Grain Cow Hide Leather
Outsole	PU / PU outsole
Midsole	Steel plate full piece
Toecap	Steel Toe cap
Height	Minimum of 110mm (EN Standard)

workXwear Cadetor Economical



Component	workXwear Cadetor Low Cut Laced up Shoes
Upper	Top Grain Cow Hide Leather
Outsole	PU / PU outsole
Midsole	Steel plate full piece
Toecap	Steel Toe cap
Height	Minimum of 110mm (EN Standard)



WATER REPELLENT UPPER



HEEL ENERGY ABSORPTION



PENETRATION RESISTANT MID-SOLE



REINFORCED TOE CAP



ANTI-STATIC SHOES



OIL AND FUEL RESISTANT SOLE



SLIP RESISTANT

workXwear Guardian Mid Cut Laced



Component	workXwear Guardian Mid Cut Laced up Ankle Boots
Upper	Top Grain Cow Hide Leather
Outsole	PU / PU outsole
Midsole	Steel plate full piece
Toecap	Steel Toe cap
Height	Height Clearance of 190mm (EN Standard)

workXwear Champion Mid Cut Zip Up



Component	workXwear Champion Mid Cut Zip up Ankle Boots
Upper	Top Grain Cow Hide Leather
Outsole	PU / PU outsole
Midsole	Steel plate full piece
Toecap	Steel Toe cap
Height	Height Clearance of 200mm (EN Standard)

workXwear Defendor Mid Cut Slip On



Component	workXwear Defendor Mid Cut Slip On Ankle Boots
Upper	Top Grain Cow Hide Leather
Outsole	PU / PU outsole
Midsole	Steel plate full piece
Toecap	Steel Toe cap
Height	Height Clearance of 165mm (EN Standard)

workXwear Protector Tall Boots



Component	workXwear Protector High Cut Slip On Tall Boots
Upper	Top Grain Cow Hide Leather
Outsole	PU / PU outsole
Midsole	Steel plate full piece
Toecap	Steel Toe cap
Height	Height Clearance of 275mm (EN Standard)

HI-VISIBILITY & PROTECTION WEAR



HSK Hi-Visibility Workwear – Be seen. Be visible

Our types of Hi-Visibility workwear are designed to provide high visibility under all day, night or rain conditions. Our range of garments fulfill all safety standards for various industries.

Our nylon wetsuit are differentiated by protection against foul weather, wind, cold or rain. They are Nylon based with additional coating for best protection against the weather conditions while keep the wearer cool and light.



HSK Hi-Visibility Vest - Be seen. Be visible

Our Hi-Visibility vest are EN471:2004 certified which features 3 different classes for highest level of protection.

All our Hi-Visibility vest are fitted with bands of retro-reflective material not less than 50mm wide.



HSK Head Protection Equipment

HSK Safety Helmets are designed to provide head protection from impact hazards in an industrial environment. They consist of a rigid shell and a suspension working together as a protective system.



HSK Eye Protection Equipment

HSK Safety Eyewear features high impact resistance, UV protection, light weight with Z87+, CE EN 166 standards to provide appropriate eye protection against hazardous or chemical environment.



HSK Respiratory Protection Equipment

A respirator is a device designed to protect the wearer from inhaling harmful dusts, fumes, vapors, or gases. Respirators come in a wide range of types and sizes used by the military, private industry, and the public. Respirators we carry range from cheaper, single-use, disposable masks to reusable models with replaceable cartridges.



HSK Fall Protection Equipment

Falls are among the most common causes of serious work related injuries and deaths. Employers must set up the work place to prevent employees from falling off of overhead platforms, elevated work stations or into holes in the floor and walls.

Safety Standards:

- SS 402 Specification for Industrial Safety Belts and Harness for
 - Part 1: General Requirements
 - Part 2: Permanent Anchors



Fire Retardant Workwear

Incorporating safety & comfort durability. Practical with modern touches.

Product Features:

- 100% Natural Cotton Blend treated with flame retardant finishing. Good for long & short term offshore mobilisation use.
- high collar for added protection.
- Concealed zipper chest pockets with allowance for kinds of devices.
- Ruler pocket on right leg & 2 side swing pockets with side entry.
- radio loops for handsfree operation.
- 8 points 50mm FR reflective bands.
- Elastic rear waistband with inserts
- Bi-swing action back for ease of movement
- Action back with heat release modacrylic FR mesh allowing body heat dissipation.
- Sleeve cuffs with adjustable & concealed snap fasteners.
- Performance guaranteed up to 50x washes minimum.
- Available in FR White with Navy styling

Safety Approvals



All Fire Safety regulations approved

- EN ISO 11612
- EN ISO 1149-5
- IEC 61482-2







Confidential Report

Our Ref: 60/01865/C



1066

Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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Date: 22 December 2017

Our Ref: 60/01865/C
Your Ref:

Page: 1 of 3

Job Title: Testing of one woven fabric

Client's Order No: -

Date of Receipt: 23rd October 2017
Date of Test Start: 28th November 2017

Description of Sample(s): One red coloured, woven fabric, identified as follows, was received for testing:

CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric in red

The client has confirmed that the fabric is available in the following colours – Red, Orange and Dark Blue. It is the opinion of BTTG™, that colour would not influence the performance levels and the performance levels detailed in this report would apply to all of the aforementioned colours.

Work Requested: We were asked to make the following test:

Induction decay testing to EN 1149-3
After 5 wash cycles according to ISO 6330 (procedure 6N, with tumble drying)



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A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.
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Our laboratories are accredited to EN ISO/IEC 17025.

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Date: 22 December 2017

Our Ref: 60/01865/C
Your Ref:

Page: 2 of 3

Sample: CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric in red

Test Method: EN 1149-3: 2004 Method 2 Induction decay
Conditioning and testing carried out at $23 \pm 1^\circ\text{C}$, $25 \pm 5\%$ r.h.

Cleansing Pretreatment: Five wash/dry cycles according to ISO 6330:2012 Procedure 6N (60°C) with tumble drying (Procedure F) (max. 60°C outlet temperature).

Summary of Results:

Determination of width between conductive threads

Measurement	Width of Gap (mm)
1	9.5
2	9.5
3	9.5
4	9.5
5	9.5
Mean	9.5

Determination of induction decay time

Shielding Factor (S)	Half Decay Time (t_{50}), s
0.11	0.31
0.09	0.50
0.10	0.42
Mean 0.10	Mean 0.41



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Page: 3 of 3

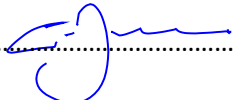
Sample: CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric in red

Assessment:

EN 1149-5 REQUIREMENTS	RESULT OBTAINED	PASS/FAIL
For a material containing conductive threads in a stripe or grid pattern the spacing of the conductive threads in one direction shall not exceed 10mm.	9.5mm	PASS
Shielding Factor (S) greater than 0.2 and / or Half Decay Time (t_{50}) less than 4 seconds	Shielding Factor (S) = 0.10 Half Decay Time (t_{50}) = 0.40	PASS

Uncertainty of measurement has not been taken into account when presenting the test result. The 95% confidence limit for this test is $\pm 5\%$ around the pass/fail levels given in EN 1149-5.

Reported by:.....  A Didycz, Senior Laboratory Technician

Countersigned by:.....  C Dean, Laboratory Director



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Confidential Report

Our Ref: 60/01865/A



1066

Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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Date: 22 December 2017

Our Ref: 60/01865/A
Your Ref:

Page: 1 of 6

Job Title: Testing of one woven fabric

Client's Order No: -

Date of Receipt: 23rd October 2017
Date of Test Start: 28th November 2017

Description of Sample(s): One red coloured, woven fabric, identified as follows, was received for testing:

CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric in red

The client has confirmed that the fabric is available in the following colours – Red, Orange and Dark Blue. It is the opinion of BTTG™, that colour would not influence the performance levels and the performance levels detailed in this report would apply to all of the aforementioned colours.

Work Requested: We were asked to make tests according to the following standard:
ISO 11612: 2015
After 5 wash cycles according to ISO 6330 (procedure 6N, with tumble drying, except where indicated)

This is a summary report detailing the results as required by the ISO 11612: 2015 performance standard.
All test methods are UKAS accredited.



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Date: 22 December 2017

Our Ref: 60/01865/A
Your Ref:

Page: 2 of 6

Sample: CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric

Performance Standard: ISO 11612: 2015

- (a) Clause 6.2.1 Heat resistance (at 180°C)
- (b) Clause 6.3.2 Limited flame spread – Face ignition
- (c) Clause 6.3.3 Limited flame spread – Edge ignition
- (d) Clause 6.4 Dimensional change due to cleaning
- (e) Clause 6.5.1 Tensile strength
- (f) Clause 6.5.2 Tear strength
- (g) Clause 7.2 Convective heat
- (h) Clause 7.3 Radiant heat

Cleansing Pretreatment: Prior to all tests except clause 6.4 five wash/dry cycles according to ISO 6330:2012 Procedure 6N (60°C) with tumble drying (Procedure F) (max. 80°C outlet temperature).

Prior to test clause 6.4 five wash/dry cycles according to ISO 6330:2012 Procedure 4N (40°C) with tumble drying (Procedure F) (max. 60°C outlet temperature).

Tests 6.3.2 and 6.3.3 also carried out in the “as received” condition.

Summary of Results: See pages 3, 4 and 5.

ISO 11612: 2015 states the following:

- “All the individual results of the specimens of a test shall meet the performance requirement”
- “The average result shall be given”
- “The estimate of uncertainty shall be applied when it may affect the rating or classification of a property”

For the purposes of assessing the sample, BTTG™ uses the following parameters:

1. The worst individual test result.
2. The mean result after uncertainty of measurement has been applied.

Date: 22 December 2017

Our Ref: 60/01865/A
Your Ref:

Page: 3 of 6

Sample: CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric

Summary of Results:

PROPERTY	TEST METHOD	EN ISO 11612 REQUIREMENTS	RESULTS OBTAINED	PASS/FAIL OR LEVEL									
6.2.1 Heat resistance (at 180°C)	ISO 17493: 2016 at 180°C	Shall not ignite or melt or shrink > 5%	Fabric did not ignite or melt. Shrinkage: <table border="0"> <tr> <td></td> <td><u>Length</u></td> <td><u>Width</u></td> </tr> <tr> <td>Mean</td> <td>-0.9%</td> <td>-0.4%</td> </tr> <tr> <td>Worst</td> <td>-1.0%</td> <td>-0.5%</td> </tr> </table>		<u>Length</u>	<u>Width</u>	Mean	-0.9%	-0.4%	Worst	-1.0%	-0.5%	PASS
	<u>Length</u>	<u>Width</u>											
Mean	-0.9%	-0.4%											
Worst	-1.0%	-0.5%											
6.3.2 Limited flame spread – Face ignition (code letter A1)	ISO 15025: 2016 Procedure A	No flaming to edge No hole formation No flaming or molten debris Afterglow time ≤ 2s Afterflame time ≤ 2s	<u>As received</u> No flaming to edge No holing No flaming or molten debris No afterglow No afterflame	PASS A1									
			<u>Pre-treated</u> No flaming to edge No holing No flaming or molten debris No afterglow No afterflame										



Date: 22 December 2017

Our Ref: 60/01865/A
Your Ref:

Page: 4 of 6

Sample: CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric

Summary of Results:

PROPERTY	TEST METHOD	EN ISO 11612 REQUIREMENTS	RESULTS OBTAINED	PASS/FAIL OR LEVEL																		
6.3.3 Limited flame spread – Bottom edge ignition (code letter A2)	ISO 15025: 2016 Procedure B (Folded edge)	No flaming to edge No flaming or molten debris Afterglow time ≤ 2s Afterflame time ≤ 2s	<u>As received</u> No flaming to edge No flaming or molten debris No afterglow No afterflame	PASS A2																		
			<u>Pre-treated</u> No flaming to edge No flaming or molten debris No afterglow No afterflame																			
6.4 Dimensional change	ISO 5077: 2007	Woven: ≤ ± 3%	<table border="0"> <tr> <td></td> <td><u>Warp</u></td> <td><u>Weft</u></td> </tr> <tr> <td>Mean</td> <td>-2.5%</td> <td>-0.5%</td> </tr> <tr> <td>Worst</td> <td>-2.8%</td> <td>-0.7%</td> </tr> </table>		<u>Warp</u>	<u>Weft</u>	Mean	-2.5%	-0.5%	Worst	-2.8%	-0.7%	PASS									
	<u>Warp</u>	<u>Weft</u>																				
Mean	-2.5%	-0.5%																				
Worst	-2.8%	-0.7%																				
6.5.1 Tensile strength	ISO 13934-1: 2013	≥ 300N	<table border="0"> <tr> <td></td> <td><u>Warp</u></td> <td><u>Weft</u></td> </tr> <tr> <td>Mean</td> <td>830N</td> <td>450N</td> </tr> <tr> <td>Worst</td> <td>779N</td> <td>341N</td> </tr> </table>		<u>Warp</u>	<u>Weft</u>	Mean	830N	450N	Worst	779N	341N	PASS									
	<u>Warp</u>	<u>Weft</u>																				
Mean	830N	450N																				
Worst	779N	341N																				
6.5.2 Tear strength	ISO 13937-2: 2000	≥ 10N	<table border="0"> <tr> <td></td> <td><u>Across warp</u></td> <td><u>Across weft</u></td> </tr> <tr> <td>Mean</td> <td>18N</td> <td>19N</td> </tr> <tr> <td>Worst</td> <td>18N</td> <td>18N</td> </tr> </table>		<u>Across warp</u>	<u>Across weft</u>	Mean	18N	19N	Worst	18N	18N	PASS									
	<u>Across warp</u>	<u>Across weft</u>																				
Mean	18N	19N																				
Worst	18N	18N																				
7.2 Convective heat (Code letter B)	ISO 9151: 2016	<table border="0"> <tr> <td><u>Level</u></td> <td><u>HTI₂₄</u></td> </tr> <tr> <td>B1</td> <td>≥ 4.0s</td> </tr> <tr> <td>B2</td> <td>≥ 10.0s</td> </tr> <tr> <td>B3</td> <td>≥ 20.0s</td> </tr> </table>	<u>Level</u>	<u>HTI₂₄</u>	B1	≥ 4.0s	B2	≥ 10.0s	B3	≥ 20.0s	<table border="0"> <tr> <td><u>Specimen</u></td> <td><u>HTI₂₄</u></td> </tr> <tr> <td>1</td> <td>5.8s</td> </tr> <tr> <td>2</td> <td>5.6s</td> </tr> <tr> <td>3</td> <td><u>5.8s</u></td> </tr> <tr> <td>Mean</td> <td>5.7s</td> </tr> </table>	<u>Specimen</u>	<u>HTI₂₄</u>	1	5.8s	2	5.6s	3	<u>5.8s</u>	Mean	5.7s	LEVEL B1
<u>Level</u>	<u>HTI₂₄</u>																					
B1	≥ 4.0s																					
B2	≥ 10.0s																					
B3	≥ 20.0s																					
<u>Specimen</u>	<u>HTI₂₄</u>																					
1	5.8s																					
2	5.6s																					
3	<u>5.8s</u>																					
Mean	5.7s																					

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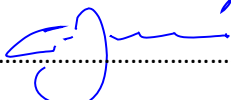
Sample: CFR265 Pyrovatex, 100% cotton flame retardant antistatic woven fabric

Summary of Results:

PROPERTY	TEST METHOD	EN ISO 11612 REQUIREMENTS		RESULTS OBTAINED		PASS/FAIL OR LEVEL
7.3 Radiant heat (Code letter C)	ISO 6942: 2002 Method B at 20kW/m ²	<u>Level</u>	<u>RHTI₂₄</u>	<u>Specimen</u>	<u>RHTI₂₄</u>	LEVEL C1
		C1	≥ 7.0s	1	14.3s	
		C2	≥ 20.0s	2	14.3s	
		C3	≥ 50.0s	3	<u>14.5s</u>	
		C4	≥ 95.0s	Mean	14.4s	

An estimation of uncertainty of measurement has been taken into account when making a judgement to any pass/fail criteria. Refer to Appendix A for further information.

Reported by:  M T Healey, Principal Technician

Countersigned by:  C Dean, Laboratory Director

Date: 22 December 2017

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Appendix A

ISO 11612: 2015 Annex E: Uncertainty of Measurement:

ISO 11612 Clauses	Test Method	95% Confidence limit
5.2 Pre-treatment	Washing: ISO 6330: 2012	Chaotic Processes Not applicable
6.2.1 Heat resistance	ISO 17493: 2016 (180°C)	± 2.8%
6.2.2 Heat resistance (optional)	ISO 17493: 2016 (260°C)	± 2.8%
6.3.2 Flame spread – Face (A1)	ISO 15025: 2016 (A)	± 5.0%
6.3.3 Flame spread – Edge (A2)	ISO 15025: 2016 (B)	± 10.8%
6.4 Dimensional change	ISO 5077: 2007	± 3.2%
6.5.1 Tensile strength (woven fabrics)	ISO 13934-1: 2013	Aramid ± 1.7% Wool ± 3.5% Cellulosic ± 4.8%
6.5.2 Tear strength (woven fabrics)	ISO 13937-2: 2000	Aramid ± 2.8% Wool ± 4.4% Cellulosic ± 5.8%
7.2 Convective heat (B)	ISO 9151: 2016	± 10.5%
7.3 Radiant heat (C)	ISO 6942: 2002 (20kW/m ²)	± 4.8%

* These uncertainty value are based on a standard uncertainty multiplied by a coverage factor k=2, which provides for a confidence level of approximately 95%.