



CARRINGTON  
TEXTILES

FLAME  
RETARDANT

PROTECTION • PERFORMANCE

DURABILITY • MULTINORM

COLLECTION



SHAPING  
THE FUTURE  
OF FABRIC



## Stock Supported Colours

### Carrington Textiles colour options. From stock to custom created

The Carrington Textiles palette includes over 200 standard colours, which is one of the largest stock supported ranges available in today's market. Within this choice you'll find shades to suit applications across an equally wide spectrum of end uses. From smart corporatewear, to heavy duty industrial PPE and military uniforms.

The colour grid in this product guide is designed to help you quickly see which of these colours is associated with specific fabrics within this particular range. And, to give the most accurate definition possible, we've also included swatches of these colours.

We realise though that there are times when our customers want to look beyond the standard shades and find a bespoke colour for a specific purpose. For example, to match corporate identity, create a new range of unique garments or satisfy their own customers' demands.

We are well experienced in meeting these needs, and fully equipped to do so. Our dedicated team of fabric technologists will be happy to work closely with you to find the perfect solution. This service includes our bespoke colour matching facility, which uses the latest advances in dyestuff technology and techniques to create a colour to meet your specification.



# FLAME RETARDANT COLOUR COLLECTION

## FLAME RETARDANT

	Flameshield 185	Flameshield 230	Flameshield 280	Flameshield 340	Flametex 275	Flamemaster Satin 330	Flamemaster Satin 365	Flameshield Satin 350	Flamemaster Satin 400	Flamemaster Satin 365	Weldshield 500
Black 48005											
Black 48362											
Black 48363	✓										
Bottle 48105											
Charcoal 48034											
Charcoal 48413											
Convoy Grey 48352		✓									
Graphite 48023											
Grey 48370											
HV Yellow 48602											
HV Yellow 602											
Navy 48009											
Navy 48027											
Navy 48179	✓	✓									
Orange 48008											
Orange 48030											
Orange 48122	✓	✓									
Red 48007											
Red 48149	✓	✓									
Royal 48010											
Royal 48015											
Royal 48130		✓									
Royal Box 48131											
White 48025	✓										

## INHERENT

	Flameban 240	Flameban 320	Flameban Extra 160	Flameban Extra 240	Flameban Extra 260 R/S	Flameban Extra 330 R/S	Flameban Max 310	Flameban Max 350	Flameban Max 310 Pro 2	Flameban Max 310 Pro 3
Black 48005										
Convoy Grey 48352										
Dark Navy 48417	✓									
Dark Navy 48517										
HV Orange 439										
HV Yellow 482										
HV Yellow 48602										
Nattex Gold	✓									
Navy 48321		✓								
Orange 48403	✓									
Red 50043	✓									
Royal 48010										
Royal 50027	✓									
Yellow 48112	✓									

## WITH ANTISTATIC

	Flamestat 145	Flamestat 250	Flamestat Satin 225	Flamestat Satin 225 Pro 2	Flamestat 290	Flamestat Satin 300	Flamestat Satin 345	Flametech 300AS	Flameshield 340AS	Flametuff 220AS	Flametuff 250AS	Flametougher 280AS
Black 48005												
Black 48362												
Black 5048												
Black 58005		✓										
Blue Graphite 48522												
Convoy Grey 48352												
Graphite 48023												
HF Navy 48041												
HV Orange 458												
HV Red 604												
HV Yellow 48602												
HV Yellow 602												
Khaki 48237												
Metro Blue 133	✓											
Mole Grey 48282		✓										
Navy 48009		✓										
Navy 48027												
Navy 48179												
Navy 48340												
Orange 48008												
Orange 48122												
Red 48007												
Red 48149												
Royal 48130												
Royal Box 48131		✓										

### Please note:

Details within this guide are correct at the time of printing, but are subject to change without prior notice. For details of exact colours and codes, please contact your Carrington Textiles representative, or visit [www.carrington.co.uk](http://www.carrington.co.uk)



# FLAME RETARDANT FABRICS



## Flameshield 185

100% cotton  
185gsm, plain

Flammability: EN ISO 14116: index 3  
(Method 15025 Procedure A)



## Flameshield 230

100% cotton  
230gsm, 2/1 twill

Flame retardant to: EN ISO 11612  
EN ISO 14116 index 3  
NFPA 2112  
Electric arc to: EN 61482-1-2 Class 1 (4kA)  
IEC 61482-1-1



## Flameshield 280

100% cotton  
280gsm, 3/1 twill

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
NFPA 2112  
Electric arc to: IEC 61482-1-1  
Hi vis: EN 20471 Yellow



## Flameshield 340

100% cotton  
340gsm, 3/1 twill

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3, NFPA 2112  
Hi vis: EN 20471 Yellow, EN 20471 Contrast trims  
Electric arc to: EN 61482-1-2 box test Class 1 (4kA)  
IEC 61482-1-1



## Flameflex 275

63% cotton / 34% polyester  
3% EOL (XLANCE®)  
275gsm, 2/1 twill

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
Hi vis: EN 20471 Contrast trims



## Flamemaster Satin 330

70% cotton / 30% polyester  
330gsm, 4/1 satin

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3



## Flamemaster Satin 365

75% cotton / 25% polyester  
365gsm, 4/1 satin

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
Electric arc to: EN 61482-1-2 box test Class 1 (4kA)



## Flameshield Satin 350

100% cotton  
350gsm, 4/1 satin

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
Electric arc to: EN 61482-1-2 box test Class 1 (4kA)



## Flameshield Satin 400

100% cotton  
400gsm, 4/1 satin

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
Electric arc to: EN 61482-1-2 box test Class 1 (4kA)  
IEC 61482-1-1



## Flamemaster 365

75% cotton / 25% polyester  
365gsm, 2/2 twill

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
Electric arc to: EN 61482-1-2 Class 1 (4kA)  
Ultra violet protection factor: BS EN 13758-1 50+



## Weldshield 500

100% cotton  
500gsm, 3/1 cross twill

Flame retardant to: EN ISO 11611, EN ISO 11612  
EN ISO 14116 index 3  
Electric arc to: EN 61482-1-2 box test Class 1 (4kA)  
IEC 61482-1-1

XLANCE® Stretch fabric.

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## INHERENT FABRICS

   	<b>Flameban 240</b> 54% Protex / 44% cotton 2% antistatic 240gsm, twill	Flame retardant to: EN ISO 11612 EN ISO 14116 index 3 Antistatic to: 1149-3-5 Electric arc to: IEC 61482-1-1 Protection against Ultraviolet Radiation: EN 13758-1 UVPF 50+
   	<b>Flameban 320</b> 54% Protex / 44% cotton 2% antistatic 320gsm, twill	Flame retardant to: EN ISO 11612 EN ISO 14116 index 3 Antistatic to: 1149-3-5 Electric arc to: IEC 61482-1-1
   	<b>Flameban Extra 160</b> 45% Protex / 35% cotton 18% nylon / 2% antistatic 160gsm, twill	Flame retardant to: EN ISO 11612 EN ISO 14116 index 3 Antistatic to: 1149-3-5 Electric arc to: IEC 61482-1-1 Protection against Ultraviolet Radiation: EN 13758-1 UVPF 50+
   	<b>Flameban Extra 240</b> 45% Protex / 35% cotton 18% nylon / 2% antistatic 240gsm, twill	Flame retardant to: EN ISO 11612 EN ISO 14116 index 3 Antistatic to: 1149-3-5 Electric arc to: IEC 61482-1-1 Protection against Ultraviolet Radiation: EN 13758-1 UVPF 50+
   	<b>Flameban Extra 260 R/S</b> 50% Protex / 41% cotton 7% nylon / 2% antistatic 260gsm, ripstop	Flame retardant to: EN ISO 11612, EN ISO 14116 index 3 BS EN ISO 15384 Antistatic to: 1149-3-5 Electric arc to: IEC 61482-1-1
   	<b>Flameban Extra 330 R/S</b> 50% Protex / 41% cotton 7% nylon / 2% antistatic 330gsm, ripstop	Flame retardant to: EN ISO 11612, EN ISO 14116 index 3 BS EN ISO 15384 Antistatic to: 1149-3-5 Electric arc to: IEC 61482-1-1
     	<b>Flameban Max 310</b> 40% Protex / 24% FR viscose / 20% polyester / 10% cotton / 4% aramid 2% antistatic, 310gsm, double weave	Flame retardant to: EN ISO 11611, EN ISO 11612, EN ISO 14116 index 3 Hi vis: EN 20471, RIS-3279-TOM Antistatic to: 1149-3-5 Electric arc to: EN 61482-1-2 Class 1 (4kA), IEC 61482-1-1 Chemical splash: EN 13034 type 6
     	<b>Flameban Max 350</b> 40% Protex / 23% polyester / 21% FR viscose / 10% cotton / 4% aramid 2% antistatic, 350gsm, double weave	Flame retardant to: EN ISO 11611, EN ISO 11612, EN ISO 14116 index 3 Hi vis: EN 20471, RIS-3279-TOM Antistatic to: 1149-3-5 Electric arc to: EN 61482-1-2 Class 1 (4kA) Chemical splash: EN 13034 type 6
     	<b>Flameban Max 310 Pro 2</b> 40% Protex / 24% FR viscose / 20% polyester / 10% cotton / 4% aramid 2% antistatic + PU membrane, 370gsm, double weave	Flame retardant to: EN ISO 11611, EN ISO 11612, EN ISO 14116 index 3 Hi vis: EN 20471, RIS-3279-TOM Antistatic to: 1149-3-5, Chemical splash: EN 13034 type 6 Electric arc to: EN 61482-1-2 Class 1 (4kA) Water repellent: EN 343 Class 3-3
     	<b>Flameban Max 310 Pro 3</b> 40% Protex / 24% FR viscose / 20% polyester / 10% cotton / 4% aramid 2% antistatic + PU membrane & nylon knit, 410gsm, double weave	Flame retardant to: EN ISO 11611, EN ISO 11612, EN ISO 14116 index 3 Hi vis: EN 20471, RIS-3279-TOM Antistatic to: 1149-3-5, Chemical splash: EN 13034 type 6 Electric arc to: EN 61482-1-2 Class 1 (4kA) Water repellent: EN 343 Class 3-3

### Flameban

The Flameban fabric family will suit end users from oil and gas through to heavy industry. Boasting above average norms with ATPV values in excess of 12 cal/cm<sup>2</sup>, this stock supported range is an excellent introduction to inherent fabrics.

### Flameban Extra

With Flameban Extra, we offer a versatile fabric that delivers additional performance on abrasion and arc rating due to its nylon content. Flameban Extra contains cotton for wearer comfort and handle, as well as antistatic properties for performance. The Flameban Extra range is built to last.

### Flameban Max

The flagship of our inherently fire retardant fabrics, it uses an innovative patented blend of fibres - delivering the ultimate performance with excellent char strength and superior electric arc performance at low weights. Our Flameban Max 350 offers Class 2 Welders certification in addition to the high end 310 properties. The Pro 2 and Pro 3 laminated versions are EN 343 3:3 to offer true multifunctionality with additional waterproof and breathability properties.





# FR WITH ANTISTATIC FABRICS



## Flamestat 145

99% cotton  
1% anti-static material  
145gsm, plain

Flame retardant to: EN ISO 11612  
EN ISO 14116 index 3  
Antistatic to: 1149-3-5  
Chemical splash: EN 13034 type 6



## Flamestat 250

75% cotton / 24% polyester  
1% antistatic  
250gsm, 2/2 twill

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611  
Antistatic to: 1149-3-5  
Chemical splash: EN 13034 type 6



## Flamestat Satin 225

50% cotton / 49% polyester  
1% antistatic, 225gsm  
4/1 satin, 9mm Negastat grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
Hi vis: EN 20471 Yellow  
Antistatic to: 1149-3-5  
Electric arc to: EN 61482-1-2 Class 1  
Chemical splash: EN 13034 type 6



## Flamestat Satin 225 Pro 2

50% cotton / 49% polyester  
1% antistatic + PU Membrane  
275gsm, 4/1 satin,  
9mm Negastat grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
Hi vis: EN 20471 Yellow. Antistatic to: 1149-3-5  
Electric arc to: EN 61482-1-2 Class 1, IEC 61482-1-1  
Chemical splash: EN 13034 type 6  
Water repellent: EN 343 Class 3-3



## Flamestat 290

75% cotton / 24% polyester  
1% anti-static, 290gsm  
2/1 twill, 9mm Negastat grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611. Antistatic to: EN 1149-3-5  
Chemical splash: EN 13034 type 6  
Electric arc to: EN 61482-1-2 Class 1 (4kA)  
Hi vis: EN 20471 Yellow, EN 20471 Contrast trims



## Flamestat Satin 300

50% cotton / 49% polyester  
1% anti-static, 300gsm  
4/1 satin, 9mm Negastat grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611. Antistatic to: EN 1149-3-5  
Chemical splash: EN 13034 type 6. Water repellent: EN 24920  
Electric arc to: EN 61482-1-2 Class 1 (4kA), IEC 61482-1-1  
Hi vis: EN 20471 Yellow, EN 20471 Contrast trim navy 48041



## Flamestat Satin 345

50% cotton / 49% polyester  
1% anti-static, 345gsm  
4/1 satin, 9mm Negastat grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611. Antistatic to: EN 1149-3-5  
Chemical splash: EN 13034 type 6  
Electric arc to: EN 61482-1-2 Class 1 (4kA), IEC 61482-1-1  
Hi vis: EN 20471 Yellow, EN 20471 Contrast trims



## Flametech 300AS

50% cotton / 49% polyester  
1% anti-static, 300gsm  
Twill faced double cloth

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
Hi vis: EN 20471 Orange, Yellow & Red, RIS-3279-TOM Orange  
Antistatic to: 1149-3-5  
Chemical splash: EN 13034 type 6  
Electric arc to: EN 61482-1-2 Class 1 (4kA)



## Flameshield 340AS

99% cotton  
1% anti-static  
340gsm, 3/1 twill

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611  
Antistatic to: 1149-3-5  
Chemical splash: EN 13034 type 6



## Flametuff 220AS

87% cotton / 12% nylon  
1% anti-static  
220gsm, 2/1 twill

Flame retardant to: EN ISO 14116 index 3  
NFPA 2112  
Antistatic to: 1149-3, 1149-5 (Predicted)  
Chemical splash: EN 13034 type 6 (with an FC finish)



## Flametuff 250AS

87% cotton / 12% nylon  
1% anti-static, 250gsm  
3/1 twill, 9mm antistatic grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611, NFPA 2112  
Antistatic to: 1149-3-5  
Electric arc to: EN 61482-1-2 Class 1 (4kA), IEC 61482-1-1  
Chemical splash: EN 13034 type 6



## Flametougher 280AS

79% cotton / 20% CORDURA®  
nylon 6,6 / 1% antistatic, 280gsm  
3/1 twill, 9mm antistatic grid

Flame retardant to: EN ISO 11612, EN ISO 14116 index 3  
EN ISO 11611, NFPA 2112  
Electric arc to: EN 61482-1-2 Class 1 (4kA), IEC 61482-1-1  
Antistatic to: 1149-3-5  
Chemical splash: EN 13034 type 6



CORDURA® is a trademark of INVISTA.



# SAFEGUARDING LIVES WITH THE HIGHEST INTERNATIONAL STANDARDS



Safety and performance are two of the most important elements we focus on when developing any of our Flame Retardant fabrics. And with standards becoming increasingly global, we subject our products to the most rigorous tests.

At Carrington Textiles we now offer a range of NFPA 2112 and UL certified fabrics, delivering best in class, exceptionally low predicted body burn percentages and available in a variety of weights.

Flameshield in its 230gsm and 280gsm offers the softness and moisture control of a 100% cotton fabric; while Flametuff 220AS, 250AS and Satin 330AS provide a cotton and high tenacity nylon blend, with antistatic properties and 50+ UPF. Flametougher also delivers antistatic protection with the extra benefit of counting with CORDURA® technology for long lasting performance.

Find details of these products in our dedicated NFPA 2112 and UL certified fabrics guide.

## Please note:


If NFPA 2112 and UL version is required, please specify when ordering.





## ACCREDITATION KEY


### Flame retardant and multifunctional fabrics


EN 11612: Protective clothing. Clothing to protect against heat & flame  
ISO 13934-1: Tensile strength  
ISO 13937-2: Tear strength  
ISO 5077: Dimensional stability  
ISO 17493: Heat resistance  
ISO 15025: Limited flame spread (A1 surface ignition, A2 edge ignition)  
ISO 9151: Convective heat (B)  
ISO 6942: Radiant heat (C)  
ISO 9185: Molten metal (E)  
ISO 12127: Contact heat (F)

 EN 14116: Protective clothing protection against heat & flame, limited flame spread  
ISO 15025: Limited flame spread

 AS/NZS 4824:2021: Protective clothing for firefighters - Requirements and test methods for protective clothing used for wildland firefighting

 BS EN ISO 15384:2020: Protective clothing for firefighters

 NFPA 2112: Protection of industrial personnel against short-duration thermal exposures from fire


 EN 11611: Protective clothing for use in welding and allied processes  
ISO 13934-1: Tensile strength  
ISO 13937-2: Tear strength  
ISO 5077: Dimensional stability  
ISO 15025: Limited flame spread (A surface ignition, B edge ignition)  
ISO 9150: Impact of spatter  
ISO 6942: Radiant heat  
EN 1149-2: Electrical resistance

### Water repellent fabrics

EN 343: Waterproof and breathable

EN 24920: Resistance of fabric to surface wetting by water

### Electric Arc fabrics

 IEC 61482-2: Protective clothing against the thermal hazards of an electric arc.  
Covers protective clothing against the thermal arc hazards in general

EN 61482-1-2: Test method: Box Test. Divided in two classes, where Class 2 is the highest level  
Class 1 - Protection against electric arc 4kA  
Class 2 - Protection against electric arc 7kA

IEC 61482-1-1: Test method: Open Arc Ranking, presented with a Value. APTV (Arc Thermal Performance Value)

### High visibility fabrics

EN 20471: High visibility warning clothing for professional use

### Chemical splash (applicable to all fabrics)

EN 13034: Protective clothing against liquid chemicals. Performance requirements for chemical protective clothing offering limited protective performance against aqueous based chemicals only (type 6 and type PB (6) equipment)

### Ultraviolet radiation (UVR) protective fabrics

EN 13758-1:2002: Textiles. Solar UV protective properties. Method of test for apparel fabrics

### Antistatic fabrics

EN 1149-1: Protective clothing: Electrostatic properties (surface resistivity)

EN 1149-3: Protective clothing. Electrostatic properties (charge decay)

EN 1149-5: Protective clothing. Electrostatic properties



## Multinorm protection that stands the test of time

We are one of Europe's leading suppliers of Flame Retardant finished fabrics for workwear. Our focus is on the market's evolving needs to create the ultimate protection. To achieve this, we work with garment manufacturers and rental laundries to develop FR fabrics that meet industry, European and industrial laundry standards.

Our extensive Flame Retardant range protects against specific or multiple hazards including fire, heat, static electricity, sparks, metal splash, chemical splash, electric arc, crude and mineral oil, acid solutions, poor visibility, foul weather, wind and low temperatures.

With a British textile legacy of 130 years, we are the leading European workwear fabric manufacturer, producing 130 million metres a year from our factories in the UK, Europe and Asia.

With our excellent global sales and customer service network, we are able to export our fabrics anywhere in the world.

Whatever the fabric, whatever the application, you can find exactly what you need by using the Fabric Finder feature on our website [www.carrington.co.uk](http://www.carrington.co.uk)

Carrington Textiles are committed to the ultimate in service. This is delivered across the world through strategically located sales representatives, agents and customer service personnel.

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## CERTIFICATES & ASSOCIATIONS

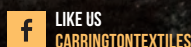


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