ProGARM®
PROTECTING LIVES

ARC FLASH & FLAME RESISTANT GARMENTS

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www.powerandcables.com
8 GREAT REASONS TO CHOOSE ProGARM®

SAFETY AND PROTECTION

ProGARM® products have inherent, fire extinguishing properties for the ultimate protection, minimising employee injury in the event of an Arc Flash incident. (see page 7)

COMFORT

“As comfortable as pyjamas”, our highly breathable and soft garments achieve greater wearer acceptance ensuring they’ll want to wear them every day.

DESIGN

Innovative features, great adjustability and considered cutting and shaping creates, what we believe are, the most comfortable and functional Arc Flash garments you can buy. (see page 12)

AVAILABILITY

ProGARM® is committed to maintaining unrivalled stock availability so we can deliver the protective garments you need as soon as possible. Order before 3pm and we will provide next day delivery.

ACCREDITATION

ProGARM® is Article 11b certified. That means our business and production facilities are audited externally, all products are quality controlled and have full product traceability. Be confident in every product that carries the ProGARM® name to keep your team safe and protected. (see page 5)

QUALITY AND DURABILITY

All ProGARM® garments are manufactured to the highest standards and carry a LIFETIME SEAM GUARANTEE. They are also tested to be colour-fast to reduce fading and we aim for less than 3% shrinkage. The result is that garments can last as much as 70% longer. (see page 6)

INNOVATION

What constitutes the ultimate in protection and great comfort today may not be enough tomorrow. ProGARM® is committed to innovating and constantly improving our products to offer better protection and even greater comfort. (see page 11)

TECHNICAL EXPERTISE AND SUPPORT

Our experienced team offers technical expertise and knowledge across an ever increasing range of industries utilising Flame Resistant, antistatic and Arc Flash protective garments. Providing advice on the right garment solutions for your team, you’ll also see the guarantees we offer and experience our excellent customer support.

CONTENTS

PRODUCT PAGES

Single Colour Collection 14
Two Tone Colour Collection 26
Hi Vis Yellow Collection 34
Hi Vis Orange Collection 42
Outer Garment Collection 50
Accessories and Other Garments 58

INFORMATION PAGES

About ProGARM® 4
EN Standards at a glance 5
ProGARM® Brands 5
ProGARM® Quality 6
ARC Flash Explained 7
ProGARM® Industry Sectors 8
Protection in Layers 9
VSS+ Fabrics 10
ProGARM® Innovations 11
Features and Benefits 12
Product Care 70
ThermSAFE™ Components 72
PPE Directive and Care Labels 73
EN Standards Explained 74
Product EN Standard Matrix 82
Bespoke Products 86
Branding and Garment Alterations 87
Size Chart 88
ProGARM® in Production 89
Notes 90

www.progarm.com
ABOUT ProGARM®

SAFE CAN ALSO BE COMFORTABLE AND INNOVATIVE

There is no goal more important than the safety of your team. ProGARM® offers garments that deliver the ultimate protection against the risks and hazards your employees encounter every day.

But being safe doesn’t mean the garments can’t be comfortable and offer what the wearer needs in terms of features, fit and function.

Our mission is to continue to lead the way in both providing the ultimate protection and wearer comfort too. That way you’ll be confident in the protective garments you provide to your team, and that they will find them comfortable to wear every day.

CONSTANT INNOVATION

What offers the ultimate protection today, may not be the protection required tomorrow. Similarly, what is the ultimate in wearer comfort today, can also be improved for tomorrow.

ProGARM® is on a never-ending journey of reviewing, improving and innovating to produce garments that not only offer greater protection, but are even more comfortable and function better for the wearer. Each product is the result of extensive in-house development work and listening to the needs of end users. We take these ideas to refine, improve and deliver high quality safety garments available for quick dispatch to you.

Every detail of a ProGARM® garment is considered, from the super soft VXS+ fabric, the zippers, reflective tapes and even the thread we use so we can offer our LIFETIME SEAM GUARANTEE.

Some of the largest businesses in the world rely on ProGARM® to deliver the protection and comfort you and your team need, day-in and day-out.

WHAT’S NEW?

Take a look at how our 2016/17 range of products continues to raise the bar in comfort, function and most importantly safety. Exciting innovations this year include:

- Upgraded Hi Vis Orange Collection that meets a higher flame-resistance and higher welding standard - Class 2 EN ISO 11611
- Two new ranges that are fully waterproof to keep you dry and a baselayer range for warmth
- Expanded range of ladies’ workwear. Popular trouser styles 5816 and 7638 are now available in ladies’ sizes
- New garments such as a new 11cal polo shirt, the 24cal helmet and a softshell jacket jam packed with useful features
- Adjustments to a number of garments to improve sizing and fit. Even more Arc test results and information on our datasheets for products such as our sweatshirts to give you complete peace of mind

EN STANDARDS AT A GLANCE

- **BS EN 1149-5**: Protective clothing – Electrostatic Properties
  - Page: 75
- **BS EN 1149-4**: Protective clothing for use in welding and allied processes
  - Page: 77
- **IEC 61482-2**: Protective clothing against the thermal hazards of an electric arc
  - Page: 76
- **BS EN ISO 11611**: Protective clothing for use in welding and allied processes
  - Page: 77
- **BS EN ISO 20471**: Protective clothing – protection against rain
  - Page: 80
- **BS EN 342**: Protective clothing – protection against cold
  - Page: 80
- **BS EN 343**: Protective clothing – protection against cold
  - Page: 80
- **BS EN 14404**: Protective clothing against liquid chemicals
  - Page: 80
- **BS EN 16404**: Personal protective equipment, knee protectors for work in the kneeling position
  - Page: 81

OUR MARQUES CONTINUE TO SET THE STANDARD IN PROTECTIVE GARMENTS:

VXS+ FABRIC

This quality assured fabric provides the ultimate in terms of performance, quality and comfort

100% INHERENT

Our inherent VXS+ fabrics guarantee Flame Resistant protection throughout the lifetime of the garment. With no fabric treatment required there is no reduction in the level of protection as the garment is washed

ThermSAFE™

Arc Flash and Flame Resistant components such as zipper components, stretch reflective tapes and buttons are constantly tested and evaluated

GO/RT 3279

Railway Group Standard – High Visibility Clothing

Page: 75

BS EN ISO 11612

Clothing to protect against heat and flame

Page: 79

BS EN ISO 11616

Protection against Heat & Flame, Limited Flame Spread

Page: 78

BS EN 13034

Protective clothing against liquid chemicals

Page: 80

BS EN 14116

Protection against Heat & Flame, Limited Flame Spread

Page: 78

BS EN 13034

Protective clothing against liquid chemicals

Page: 80

BS EN 342

Protective clothing – protection against cold

Page: 80

BS EN 343

Protective clothing – protection against cold

Page: 80

BS EN 14404

Personal protective equipment, knee protectors for work in the kneeling position

Page: 81
**ProGARM® QUALITY - THE FACTS**

**PRODUCT DEVELOPMENT**
We listen carefully to our buyers and wearers, incorporating comments and suggestions into new garment styles and ranges.

**DURABILITY**
All garments are not the same. Take a closer look and see how we construct garments and our garment components to deliver increased garment life.

**UNIQUE ProGARM® DESIGNS**
Developing our own designs means we’re constantly innovating and improving. We’re also able to accommodate any special design requirements you may have.

**ISO9001**
ProGARM® is ISO9001 certified, demonstrating our continued commitment to high quality products, efficient manufacturing and an excellent customer experience.

**ARTICLE 11B CERTIFIED**
ProGARM® is Article 11B certified. That means our business and production facilities are audited externally, all products are quality controlled and have full product traceability.

**LIFETIME SEAM GUARANTEE**
ProGARM® garments carry a lifetime guarantee on the structural seams of the garment – another example of our unparalleled commitment to quality and your satisfaction.

**QUALITY MATERIALS**
The VXS+ range of fabrics and quality assured manufacturing processes are the foundation of the ProGARM® product range. Fabric is selected for performance, comfort, protection and how well it will wash.

**ARC FLASH CERTIFICATION**
As part of our commitment to continually raise the levels of certification of our products, the majority of our garments are now Arc Flash certified as well as Flame Resistant.

**EUROPEAN PRODUCTION**
ProGARM® produces all the garments within the EU to ensure speed of delivery, quality control and traceability.

**OEKO-TEX® CERTIFIED**
OEKO-TEX® is an independent testing system in textiles, enhancing product safety and sustainable production. Wherever possible we only use products from OEKO-TEX® approved suppliers.

**CONTINUOUS PRODUCT TESTING**
In addition to wearer trials, we also test seams, components and fabrics in laboratory conditions to understand and maximise performance.

**ARC FLASH – IEC 61482 EXPLAINED**

**SCOPE**
(Excerpt from the International Standard)
This part of IEC 61482 is applicable to protective clothing used in work if there is an electric arc hazard.

This standard specifies requirements and test methods applicable to materials and garments for protective clothing for electrical workers against the thermal hazards of an electric arc based on:
- Relevant general properties of the textiles, tested with selected textile test methods
- Arc thermal resistance properties

**TEST METHODS**

**OPEN ARC TEST METHOD: IEC 61482-1-1**
This test method gives a Calorific Value for each garment – expressed as an ATPV (Arc Thermal Protection Value) or EBT Value (Energy Breakopen Threshold) - and in this way, layered garment systems can be built up with testing results that correspond directly to your Arc Flash Risk Assessments.

**BOX TEST METHOD: IEC 61482-1-2**
This test method gives results of either 4kA (Class 1) or 7kA (Class 2) with Class 2 being a higher level of protection and is established in the European market. Garments in the ProGARM® collection are tested in this way but the results cannot be directly related to Arc Flash Risk Assessments in the same way that Calorific Values can be in the Open Arc Test Method.

For more information on Arc Flash test methods call us on 01482 679600
ProGARM® SPECIALIST INDUSTRY EXPERIENCE

UTILITIES AND POWER GENERATION

Whether you need protection for your teams in your coal-fired or hydro-electric power station, or for those working with electricity outside of your facilities, rely on ProGARM® for the ultimate in worker protection and to provide a range of clothing with unparalleled comfort.

INDUSTRIAL ELECTRICAL

The Health and Safety Executive and the European Union are specifying increasing levels of flame resistance and Arc Flash protection for clothing worn by workers involved in industrial electrical roles.

PETROCHEMICAL

Thousands of workers in the petrochemical sector already trust ProGARM® to provide the protection they need day after day.

They know that not only will the inherent VXS+ fabric retain its flame resistance throughout the life of the garment but also that our understanding of their needs creates the most functional and comfortable garments they could ask for.

RAIL

The electrification of our railways has exposed rail workers to increased risks from Arc Flash. Our Hi Vis Orange range of products complies with the rail industry’s requirements in terms of visibility and Arc Flash.

IEC 61482 - PROTECTION IN LAYERS

LAYERED PROTECTION WITH ProGARM®

When Flame Resistant Arc Flash protective garments are worn together or in a layered combination, the PPE provides the wearer with the best ‘last line of defence’ against an Arc Flash incident.

Our workwear is designed to replace your traditional workwear in order to ensure maximum comfort. It’s not heavy or coarse like traditional cotton based workwear but soft and breathable.

Layered garment systems also give total protection values higher than the individual protection values of each garment when added together. As air is a poor conductor of heat, the air gap between the garments acts as an insulator and increases the total calorific value of the garment system.

ARC RATED CATEGORY CHART BASED ON NFPA 70E 2015

An Arc number is a method to determine the required Arc rating of a garment worn for a given work task. Some work tasks will demand wearing protective garments in multiple layers to reach the required level of Arc protection and this information should be provided by your employer as the results of their Arc Flash Risk Assessments.

The NFPA identified four Arc risk category levels, which are numbered by severity from 1 to 4 (1 being the lowest and 4 being the highest risk). The Arc Category (ARC) is the level of Arc Flash protection clothing you must wear to protect against a minimum level of incident energy measured in calories/cm².

This means that electrical equipment, depending upon the energy delivering capability, under fault conditions can cause an explosion, or arc fault of a certain level, again measured in calories/cm². The resulting explosion is able to deliver an amount of heat to a certain distance.

Each level, 0-4, is rated at a certain amount of flame resistance, measured again in calories/cm².

<table>
<thead>
<tr>
<th>ARC 1</th>
<th>4 cal</th>
<th>MINIMUM CAL RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 2</td>
<td>8 cal</td>
<td>MINIMUM CAL RATING</td>
</tr>
<tr>
<td>ARC 3</td>
<td>25 cal</td>
<td>MINIMUM CAL RATING</td>
</tr>
<tr>
<td>ARC 4</td>
<td>40 cal</td>
<td>MINIMUM CAL RATING</td>
</tr>
<tr>
<td>ARC 5</td>
<td>31 cal</td>
<td>MINIMUM CAL RATING</td>
</tr>
</tbody>
</table>

ProGARM® 5280 POLO SHIRT

ProGARM® 5630 SWEATSHIRT

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ABOUT VXS+ FABRICS

INHERENT OR TREATED FABRICS?

VXS+ Inherent Fabrics give peace of mind and ultimate protection. Unlike chemically treated fabrics, their Flame Resistant properties do not wash out giving protection to the wearer throughout the life of the garment. Other features include improved comfort levels and reduced shrinkage.

VXS+ IS A HIGH PERFORMANCE AND UNIQUELY BALANCED BLEND OF FIBRES FOR ULTIMATE COMFORT

For many years, wearers of Flame Resistant garments have had the discomfort of heavyweight cotton drill fabrics that are uncomfortable to wear and shrink extensively with washing. With the introduction of ProGARM® VXS+ fabric, wearers can now benefit from:

- **INHERENT PROTECTION**
  Flame Resistant properties last the lifetime of the fabric and do not wash out

- **INSTANT EXTINGUISHING PROPERTIES**
  Ultimate protection against Flame and Arc Flash Hazards

- **GREAT COMFORT**
  Breathable, soft to wear and fantastic to the touch

- **HIGHLY DURABLE**
  Colourfast with less than 3% washing shrinkage

INSTANT EXTINGUISHING PROPERTIES

The blend and composition of the VXS+ fabrics offer outstanding performance against traditional treated cotton and even more expensive aramid blends of fabrics. Watch the videos on the ProGARM® YouTube channel or request a visit from one of our sales representatives to see how quickly these fabrics instantly extinguish when the ignition source is removed.

GREAT COMFORT

Using advanced textile technologies we now incorporate the VXS+ blend of fabric into all our garments to increase the comfort for the wearer. By using fibres like Modacrylics, Cotton, Viscose, Carbon and Lycra®, the result is garments wearers want to work in and your assurance of protection at all times.

HIGHLY DURABLE

Excellent colour fastness and appearance is a key feature of the VXS+ fabric along with low shrinkage levels and minimum pilling. The majority of fabrics have been tested to 50 industrial washes with some of the top performers being subjected to further Tunnel Drying before being retested and passing the Flame Resistant tests after washing. Further tests include colour fastness and strength in the warp and weft.

ProGARM® INNOVATIONS

ALWAYS INNOVATING

ProGARM® is on a never-ending journey of reviewing, improving and innovating to produce garments that not only offer greater protection, but are more comfortable and function better for the wearer.

Take a look at some of the more recent innovations you will see in our garments:

WARM AND DRY

We’re excited to be launching two new ranges of ProGARM® garments – a range of waterproofs to keep your team dry and a range of baselayers to keep them warm.

Taking cues from the best in waterproof clothing in consumer markets, our waterproof range is jam-packed with great garment features to make working in the worst of the weather as comfortable as possible. We believe that the right garment cut, and features such as inner cuffs to the jackets, make these garments the leader in protection from the elements as well as the hazards of the job.

Layer up with a ProGARM® baselayer and you are increasing not only your flame resistance and Arc Flash protection but also protecting against the cold. We know that worker comfort is paramount in getting the job done quickly and accurately and yet again ProGARM® innovates to create comfortable and practical garments that your team will want to wear.

ProGARM® SafetyICON™ MARKING

The SafetyICON™ on each ProGARM® garment provides a quick visual reference to identify the capabilities of the garment and allows you to check whether the correct garments are being worn.

Now available across the range, the new marks feature the EN Standard symbols, which create a quick visual check for safety officers in all kinds of industry sectors.

MORE LADIES’ PRODUCTS

We’ve continued to support the development of female specific products with the release of further specific ladies’ products across a number of ranges. Most exciting is that popular trouser styles 5816 and 7638 are now available in ladies’ sizes.

ThermSAFE™ STRETCH TAPE

A new development by ProGARM®, our ThermSAFE™ tape is used on knitted garments such as polo shirts and sweatshirts. Traditionally heat applied tapes lack flexibility and stretch, changing the nature and characteristics of the fabric to which they have been applied and reducing the range of movement and comfort.

This unique new tape has a new formulation within the reflective material and has been certified to the new EN ISO 20471 High Visibility standard and tested for 50 washes. More product innovation from ProGARM®.

UPGRADED HI VIS ORANGE COLLECTION

We don’t rest on our laurels. Take a look at our upgraded Hi Vis Orange Collection, which now meets a higher flame resistance and higher welding standard - Class 2 EN ISO 11116.
**ProGARM® FEATURES & BENEFITS**

**INTERNAL ELASTICATED WAISTBAND**
Gives improved garment fit for safety and comfort.

**INTERNAL KNEEPAD POCKETS**
Allow kneepads to be added for wearer comfort and protection.

**THREE NEEDLE SEAM**
Increases durability and the life of the garment.

**DOUBLE STITCHED REFLECTIVE TAPE**
Ensures the reflective tapes remain intact and increases the life of the garment.

**EASY-STRETCH PANEL**
Improves the range of movement especially when stretching the arm.

**ADJUSTABLE VELCRO® CUFFS**
Allow a close fit for comfort and safety especially when working with gloves.

**ThermSAFE™ PLASTIC POPPERS**
Made from high-grade, non-spark, FR nylon 6.6 for safety and garment longevity.

**GAS MONITOR LOOP**
Provides a secure location point for a gas monitor or other portable items.

**ThermSAFE™ PLASTIC ZIPPERS**
Manufactured from high-grade, non-spark, FR nylon 6.6 for safety and garment longevity.

**SafetyICON™ MARKINGS**
Provide instant visual recognition of garment standards.

**INTERNAL ELASTICATED WAISTBAND**
Gives improved garment fit for safety and comfort.

**INTERNAL KNEEPAD POCKETS**
Allow kneepads to be added for wearer comfort and protection.

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**SafetyICON™ MARKINGS**
Provide instant visual recognition of garment standards.
INHERENT PROTECTION
Flame Resistant properties last the lifetime of the fabric and do not wash out

GREAT COMFORT
Breathable, soft to wear and fantastic to the touch

INSTANT EXTINGUISHING PROPERTIES
Ultimate protection against Flame and Arc Flash Hazards

HIGHLY DURABLE
Colourfast with less than 3% washing shrinkage* *only on certain products

For full Product Matrix outlining EN Standards see page 82

SINGLE COLOUR COLLECTION

5200 POLO SHIRT
PAGE 17

5630 SWEATSHIRT
PAGE 19

5850 JACKET
PAGE 21

6100 COVERALL
PAGE 23

7636 LADIES’ TROUSER
PAGE 25

5280 POLO SHIRT
PAGE 16

5430 T-SHIRT
PAGE 18

5790 LINED FLEECE JACKET
PAGE 20

5896 LAB COAT
PAGE 22

7638 TROUSER
PAGE 24
ProGARM® 5280 POLO SHIRT // SINGLE COLOUR COLLECTION

EN STANDARDS | LOI | ARC | FABRIC
---|---|---|---
| | | | 34.3%

FEATURES AND BENEFITS
- Enclosed stud placket: Allows quick fastening
- VXS+ blend: Natural feel, comfortable and soft
- Breathable: With good moisture management
- ThermSAFE™ plastic FR poppers: CE Certified
- Knitted collar with tipping: Ensures best appearance after washing
- Rib knit cuffs: Close fit
- Colour matched to other navy ProGARM® garments: Best appearance
- SafetyICON™ on arm: Visual EN Standards icon system

Sizes: S-4XL  Colour: Navy
Fabric specification: VXS+ Inherent Pique Fabric, Navy - 210gms
Product care: 

ProGARM® 5200 POLO SHIRT // SINGLE COLOUR COLLECTION

EN STANDARDS | LOI | ARC | FABRIC
---|---|---|---
| | | | 31.2%

FEATURES AND BENEFITS
- Enclosed stud placket: Allows quick fastening
- VXS+ blend: Natural feel, comfortable and soft
- Breathable: With good moisture management
- ThermSAFE™ plastic FR poppers: CE Certified
- Knitted collar with tipping: Ensures best appearance after washing
- Rib knit cuffs: Close fit
- Colour matched to other navy ProGARM® garments: Best appearance
- SafetyICON™ on arm: Visual EN Standards icon system

Sizes: S-4XL  Colour: Navy
Fabric specification: VXS+ Inherent Interlock Fabric, Navy - 260gms
Product care: 

Plastic popper fastening and rib tipping on collars
Enclosed fastenings on placket
SafetyICON™ EN Standard identification

Ultra-soft and durable VXS+ fabric
Enclosed fastenings on placket
SafetyICON™ EN Standard identification
**ProGARM® 5430 T-SHIRT**

**FEATURES AND BENEFITS**
- Round neck rib knit collar: Traditional design
- VXS+ blend: Natural feel, comfortable and soft
- Breathable: With good moisture management
- Open cuffs: Relaxed fit
- Generous length: Maximum protection
- Colour matched to other navy ProGARM® garments: Best appearance
- SafetyICON™ on arm: Visual EN Standards icon system

**Sizes:** S-4XL  
**Colour:** Navy

**Fabric specification:**  
VXS+ Inherent Jersey Fabric, Navy - 200gms

**Product care:**

- Open cuff for casual relaxed fit
- Twin needle stitch on neckline
- Ultra-soft and durable VXS+ fabric

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**ProGARM® 5630 SWEATSHIRT**

**FEATURES AND BENEFITS**
- Brushed fleece inner: Winter warmth
- VXS+ blend: Natural feel, comfortable and soft
- Breathable: With good moisture management
- Round neck collar with stretch rib: Smart appearance
- 5cm stretch rib hem: Best fit around the waist
- Rib knit cuffs: Close fit
- Colour matched to other navy ProGARM® garments: Best appearance
- SafetyICON™ on arm: Visual EN Standards icon system
- Arm pocket: Useful pocket for phone or small items

**Sizes:** S-4XL  
**Colour:** Navy

**Fabric specification:**  
VXS+ Inherent Sweat Fabric, Navy - 320gms

**Product care:**

- VXS+ fabric featuring brushed fleece inner for warmth
- Twin needle stitch on neckline
- Innovative arm pocket with flap
**ProGARM® 5790 LINED FLEECE JACKET** // SINGLE COLOUR COLLECTION

**FEATURES AND BENEFITS**
- Mandarin collar / Maximum neck protection
- Two front pockets with zippers / Secure storage
- Internal pocket / With secure Velcro® tab
- Now fully lined / Extra warmth and protection
- Draw cord waist adjustment with toggles / Close waist fit
- SafetyICON™ on arm / Visual EN Standards icon system
- Elasticated cuff / Close fit around wrist
- ThermSAFE™ plastic FR zipper / CE Certified
- Extended back / Protection when bending over

Sizes: S-4XL  
Colour: Navy

**Fabric specification**
- Outer Layer: VXS+ 310F 300g/m² Fleece Inherent Fabric
- Lining: VXS+ 230C 230g/m² Woven Fabric

**Product care:**

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**ProGARM® 5850 JACKET** // SINGLE COLOUR COLLECTION

**FEATURES AND BENEFITS**
- Mandarin collar / Maximum neck protection
- Vertical chest pocket with zipper / Discreet design
- Gas monitor loop / Secure fixing point
- SafetyICON™ on arm / Visual EN Standards icon system
- 5cm FR AS reflective tape / Double stitched for longer life
- Phone pocket on sleeve with flap / Safe and secure
- Velcro® secured cuff tabs / Close fit around wrist or gloves
- Side access pockets with flaps / Prevents entry of debris
- ThermSAFE™ plastic FR zipper / CE Certified
- Extended back / Protection when bending over
- Triple stitched side seams / Lifetime quality assurance
- Easy-Stretch™ side panels / Maximum wear comfort

Sizes: S-4XL  
Colour: Navy

**Fabric specification:**
- NSW+ 250W 250g/m² Woven Inherent Fabric

**Product care:**

---

**SEAM GUARANTEE**

- Features elastic cuffs
- Side pockets with ThermSAFE™ zip
- Drawcord waist adjustment with toggles for better fit
- Napoleon style vertical chest pocket with ThermSAFE™ Zipper
- SafetyICON® EN Standard identification
- Adjustable waist for improved fit

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**ProGARM® 5896 LAB COAT**

**FEATURES AND BENEFITS**
- Relaxed neck
- Traditional design
- Double cuff poppers
- Adjustable for best fit
- Side pleats
- Improved fit
- ThermSAFE™ plastic FR poppers
- CE Certified
- Three front pockets
- Useful storage space
- SafetyICON™ on arm
- Visual EN Standards icon system

Sizes: S-4XL  
Colour: Navy

Fabric specification
VXS+ 300W 300g/m² Woven Inherent Fabric with FC Finish

Product care: 

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**ProGARM® 6100 COVERALL**

**FEATURES AND BENEFITS**
- Mandarin collar
- Maximum neck protection
- Kneepad pockets
- Wear with kneepads for extra comfort
- Chest Pockets with zippers
- Secure storage
- Gas monitor loop
- Secure fixing point
- SafetyICON™ on arm
- Visual EN Standards icon system
- 5cm FR AS reflective tape
- Double stitched for longer life
- Phone pocket on sleeve with flap
- Safe and secure
- Velcro® secured cuff tabs
- Close fit around wrist or gloves
- Side access pockets
- With entry inside coverall
- ThermSAFE™ plastic FR zippers
- CE Certified
- Internal elastic 2Point adjustable waistband
- Ensures close fit
- Triple stitched side seams
- Lifetime quality assurance
- Easy-Stretch™ side panels
- Maximum wear comfort
- Action back
- For improved comfort

Sizes: S-4XL, Regular leg (31”/80cm)  
M-2XL, Tall leg (33”/85cm)  
Short Leg by re-hemming  

Colour: Navy, Orange

Fabric specification:
VXS+ 250W 250g/m² Woven Inherent Fabric

Product care: 

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Also available in Orange
**ProGARM® 7638 TROUSER**

**FEATURES AND BENEFITS**

- Combat pocket with flap
  - Safe storage space
- Kneepad pockets
  - Wear with kneepads for extra comfort
- Mobile phone pocket
  - Keep your phone safe
- Side access pockets
  - Traditional style
- Extra wide belt loop at rear
  - Prevents belt riding up
- ThermSAFE™ plastic FR zipper
  - CE Certified
- SafetyICON™ on leg pocket
  - Visual EN Standards icon system
- Rear pockets with flap
  - Secure storage space
- Triple stitched side seams
  - Lifetime quality assurance
- Reinforced crotch
  - Improved longevity
- ThermSAFE™ jeans button
  - Jeans style fastening

**SIZES:**

- 30-52" Regular leg (32"/81cm)
- 32-44" Tall leg (34"/86cm)
- 32-42" Short leg (30"/76cm)

**COLOUR:**

- Navy

**FABRIC:**

- VXS+ 250g/m² Woven Inherent Fabric

**PRODUCT CARE:**

- Wash at 30°C
- Tumble dry
- Do not iron
- Do not dry clean

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**ProGARM® 7636 LADIES’ TROUSER**

**FEATURES AND BENEFITS**

- Combat pocket with flap
  - Safe storage space
- Kneepad pockets
  - Wear with kneepads for extra comfort
- Mobile phone pocket
  - Keep your phone safe
- Side access pockets
  - Traditional style
- Extra wide belt loop at rear
  - Prevents belt riding up
- ThermSAFE™ plastic FR zipper
  - CE Certified
- SafetyICON™ on leg pocket
  - Visual EN Standards icon system
- Rear pockets with flap
  - Secure storage space
- Triple stitched side seams
  - Lifetime quality assurance
- Reinforced crotch
  - Improved longevity
- ThermSAFE™ jeans button
  - Jeans style fastening

**SIZES:**

- 8-24 Regular leg (30"/76cm)
- 8-24 Tall leg (32"/81cm)

**COLOUR:**

- Navy

**FABRIC:**

- VXS+ 250g/m² Woven Inherent Fabric

**PRODUCT CARE:**

- Wash at 30°C
- Tumble dry
- Do not iron
- Do not dry clean
TWO TONE COLOUR COLLECTION

100% INHERENT

✓ INHERENT PROTECTION
Flame Resistant properties last the lifetime of the fabric and do not wash out

✓ INSTANT EXTINGUISHING PROPERTIES
Ultimate protection against Flame and Arc Flash Hazards

✓ GREAT COMFORT
Breathable, soft to wear and fantastic to the touch

✓ HIGHLY DURABLE
Colourfast with less than 3% washing shrinkage*

*only on certain products

For full Product Matrix outlining EN Standards see page 82

For full Product Matrix outlining EN Standards see page 82

5808 JACKET
PAGE 28

5816 TROUSER
PAGE 29

5814 LADIES’ TROUSER
PAGE 30

6458 COVERALL
PAGE 31

6444 COVERALL
PAGE 32

6446 LADIES’ COVERALL
PAGE 33
ProGARM® 5808 JACKET

FEATURES AND BENEFITS

Mandarin collar / Maximum neck protection
Two front pockets with zippers / Secure storage
Gas monitor loop / Secure fixing point
SafetyICON™ on arm / Visual EN Standards icon system
5cm FR AS reflective tape / Double stitched for longer life
Phone pocket on sleeve with flap / Safe and secure
Velcro® secured cuff tabs / Close fit around wrist or gloves
Side access pockets with flaps / Prevents entry of debris
ThermSAFE™ plastic FR zipper / CE Certified
Extended back / Protection when bending over
Triple stitched side seams / Lifetime quality assurance
Easy-Stretch™ side panels / Maximum wear comfort

Sizes: S-4XL  Colour: Navy/Yellow

Fabric specification
VXS+ 300W 300g/m² Woven Inherent Fabric with FC Finish

Product care:

ProGARM® 5816 TROUSER

FEATURES AND BENEFITS

5cm FR AS reflective tape / Double stitched for longer life
Kneepad pockets / Wear with kneepads for extra comfort
Combat pocket with flap / Safe storage space
Mobile phone pocket / Keep your phone safe
Side access pockets with flaps / Protects from debris entry
Extra wide belt loop at rear / Prevents belt riding up
ThermSAFE™ plastic FR zipper / CE Certified
SafetyICON™ on leg pocket / Visual EN Standards icon system
Two rear pockets with flaps / Secure storage space
Triple stitched side seams / Lifetime quality assurance
Reinforced crotch / Improved longevity
ThermSAFE™ jeans button / Jeans style fastening

Sizes: 30-52” 30-44” 32-42”  Colour: Navy/Yellow

Fabric specification:
VXS+ 300W 300g/m² Woven Inherent Fabric with FC Finish

Product care:

www.progarm.com +44 (0)1482 679600 info@progarm.com

SEAM GUARANTEE
**ProGARM® 5814 LADIES’ TROUSER**

**FEATURES AND BENEFITS**

- 5cm FR AS reflective tape
  - Double stitched for longer life
- Kneepad pockets
  - Wear with kneepads for extra comfort
- Combat pocket with flap
  - Safe storage space
- Mobile phone pocket
  - Keep your phone safe
- Side access pockets with flaps
  - Protects from debris entry
- Extra wide belt loop at rear
  - Prevents belt riding up
- ThermSAFE™ plastic FR zipper
  - CE Certified
- SafetyICON™ on leg pocket
  - Visual EN Standards icon system
- Two rear pockets with flaps
  - Secure storage space
- Triple stitched side seams
  - Lifetime quality assurance
- Reinforced crotch
  - Improved longevity
- ThermSAFE™ jeans button
  - Jeans style fastening

**FEATURES AND BENEFITS**

- Mandarin collar
  - Maximum neck protection
- Kneepad pockets
  - Wear with kneepads for extra comfort
- Vertical zip chest pockets
  - Accessible when wearing a harness
- Expandable ankle opening with zippers
  - Easy removal
- SafetyICON™ on arm
  - Visual EN Standards icon system
- 5cm heat applied reflective tape
  - Lighter weight
- Combat pocket on leg plus sleeve pocket
  - Ample space
- Velcro® secured cuff tabs
  - Close fit around wrist or gloves
- Side access pockets
  - With entry inside coverall
- ThermSAFE™ plastic FR zippers
  - CE Certified
- Internal elastic 2Point adjustable waistband
  - Ensures close fit
- Triple stitched side seams
  - Lifetime quality assurance
- Easy-Stretch™ side panels
  - Maximum wear comfort

**PRODUCT SPECIFICATIONS**

**ProGARM® 5814 LADIES’ TROUSER**

- **Sizes:**
  - 8-24 Regular leg (30”/76cm)
  - 8-24 Tall leg (32”/81cm)
- **Fabric specification:**
  - VXS+ 250W 300g/m² Woven Inherent Fabric
- **Product care:**
  - 60°C P

**ProGARM® 6458 COVERALL**

- **Sizes:**
  - S–4XL Regular leg (31”/80cm)
  - M–2XL Tall leg (33”/85cm)
- **Fabric specification:**
  - VXS+ 250W 300g/m² Woven Inherent Fabric
- **Product care:**
  - 60°C P

**SEAM GUARANTEE**

- Triple needle stitch seams for extra longevity
- Wide rear belt loop restricts excess belt movement
- Combat pocket on right leg with SafetyICON™ EN Standards identification
- Internal elastricated waistband for improved fit
- Combat pocket on right leg with phone pocket
- Vertical chest pockets for use with harnesses

**PRODUCT SPECIFICATIONS**

**ProGARM® 6458 COVERALL**

- **Sizes:**
  - S–4XL Regular leg (31”/80cm)
  - M–2XL Tall leg (33”/85cm)
- **Fabric specification:**
  - VXS+ 250W 300g/m² Woven Inherent Fabric
- **Product care:**
  - 60°C P
**ProGARM® 6444 COVERALL**

**FEATURES AND BENEFITS**

- Mandarin collar // Maximum neck protection
- Kneepad pockets // Wear with kneepads for extra comfort
- Chest pockets with zippers // Secure storage
- Gas monitor loop // Secure fixing point
- SafetyICON™ on arm // Visual EN Standards icon system
- 5cm FR AS reflective tape // Double stitched for longer life
- Phone pocket on sleeve with flap // Safe and secure
- Velcro® secured cuff tabs // Close fit around wrist or gloves
- Side access pockets with flaps // With entry inside coverall
- ThermSAFE™ plastic FR zippers // CE Certified
- Internal elastic 2 Point adjustable waistband // Ensures close fit
- Triple stitched side seams // Lifetime quality assurance
- Easy-Stretch™ side panels // Maximum wear comfort
- Action back // For improved comfort

**EN STANDARDS**

- **LOI**: 29.3%
- **ARC**: 2
- **FABRIC**: Inherent

<table>
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<th>Class</th>
<th>EN Standards</th>
<th>ARC</th>
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**Fabric specification**:

- **Fabric**: 300W 300g/m² Woven Inherent Fabric with FC Finish

**Product care**:

- **60°**
- **P**

**Sizes**:

- 38–60“ Regular leg (31”/80cm)
- 40–52” Tall leg (33”/85cm)

**Colour**: Navy/Yellow

**SEAM GUARANTEE**

- Features fluid repellent coating on fabric
- Adjustable cuff with ThermSAFE™ fastening
- Internal elasticated waistband for improved fit

---

**ProGARM® 6446 LADIES’ COVERALL**

**FEATURES AND BENEFITS**

- Mandarin collar // Maximum neck protection
- Kneepad pockets // Wear with kneepads for extra comfort
- Chest pockets with zippers // Secure storage
- Gas monitor loop // Secure fixing point
- SafetyICON™ on arm // Visual EN Standards icon system
- 5cm FR AS reflective tape // Double stitched for longer life
- Phone pocket on sleeve with flap // Safe and secure
- Velcro® secured cuff tabs // Close fit around wrist or gloves
- Side access pockets with flaps // With entry inside coverall
- ThermSAFE™ plastic FR zippers // CE Certified
- Internal elastic 2 Point adjustable waistband // Ensures close fit
- Triple stitched side seams // Lifetime quality assurance
- Easy-Stretch™ side panels // Maximum wear comfort
- Action back // For improved comfort

**EN STANDARDS**

- **LOI**: 29.3%
- **ARC**: 2
- **FABRIC**: Inherent

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<td>11611-4:2004</td>
<td>2</td>
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</tbody>
</table>

**Fabric specification**:

- **Fabric**: 300W 300g/m² Woven Inherent Fabric with FC Finish

**Product care**:

- **60°**
- **P**

**Sizes**:

- 8-18 Regular leg (31”/80cm)
- 8-18 Tall leg (33”/85cm)
- Short leg Version by re-hemming

**Colour**: Navy/Yellow

**SEAM GUARANTEE**

- Featuring ThermSAFE™ zipper
- Gas monitor loop on chest
- Adjustable cuff with ThermSAFE™ fastening

---

**SEAM GUARANTEE**

- Features fluid repellent coating on fabric
- Adjustable cuff with ThermSAFE™ fastening
- Internal elasticated waistband for improved fit

---

**Class 3**

- Pt. 5:2008
- Pt. 3:2004

- Charge Decay

- **ATPV=** 9.0cal/cm²

- Pt. 5:2008
- Pt. 3:2004

- Charge Decay

- **ATPV=** 9.0cal/cm²
HI VIS YELLOW COLLECTION

† INHERENT PROTECTION
Flame Resistant properties last the lifetime of the fabric and do not wash out

† GREAT COMFORT
Breathable, soft to wear and fantastic to the touch

† INSTANT EXTINGUISHING PROPERTIES
Ultimate protection against Flame and Arc Flash Hazards

† HIGHLY DURABLE
Colourfast with less than 3% washing shrinkage*  
*only on certain products

For full Product Matrix outlining EN Standards see page 82

5286 POLO SHIRT
PAGE 36

5626 SWEATSHIRT
PAGE 37

9910 SOFTSHELL JACKET
PAGE 38

7480 COVERALL
PAGE 39

7418 TROUSER
PAGE 40

100% INHERENT

HI VIS YELLOW COLLECTION

INHERENT
**ProGARM® 5286 POLO SHIRT**

**FEATURES AND BENEFITS**

- Enclosed stud placket: Allows quick fastening
- VXS+ blend: Natural feel, comfortable and soft
- Breathable: With good moisture management
- ThermSAFE™ plastic FR poppers: CE Certified
- Knitted collar with tipping: Ensures best appearance after washing
- Contrast colour collar: Stylish and practical
- Rib knit cuffs: Close fit
- SafetyICON™ on arm: Visual EN Standards icon system
- 5cm FR AS reflective tape: Heat applied to improve flexibility

**Sizes:** S-4XL  **Colour:** HV Yellow

**Fabric specification:** VXS+ Inherent Pique Fabric, HV Yellow - 210gms

**Product care:**

- Heat applied stretch tape for additional comfort
- Stretch cuff for better fit
- Enclosed fastenings on placket

---

**ProGARM® 5626 SWEATSHIRT**

**FEATURES AND BENEFITS**

- VXS+ blend: Natural feel, comfortable and soft
- Breathable: With good moisture management
- Rib knit cuffs: Close fit
- SafetyICON™ on arm: Visual EN Standards icon system
- 5cm FR AS reflective tape: Heat applied to improve flexibility
- Brushed fleece inner: Winter warmth
- Round neck collar with stretch rib: Smart appearance
- 5cm stretch rib hem: Best fit around the waist
- Arm pocket: Useful pocket for phone or small items

**Sizes:** S-4XL  **Colour:** HV Yellow

**Fabric specification:** VXS+ Inherent Sweat Fabric, HV Yellow - 320gms

**Product care:**

- Twin needle stitch on neckline
- Ultra-soft and durable VXS+ fabric
- Stretch cuff for better fit

---

[www.progarm.com](http://www.progarm.com)  +44 (0)1482 679600  info@progarm.com
ProGARM® 9910 SOFTSHELL JACKET

FEATURES AND BENEFITS

Two tone design  Practical and stylish
Elasticated inner cuffs  Wind proofing
Velcro® fastening tabs on cuffs and back  Improved fit
Radio loop  Attaching point on left breast
Zipped Napoleon pocket on left breast with incorporated phone pocket  Safes and secure
Inner pockets on right hand side  Storage space
Mandarin collar  Maximum neck protection
50mm double stitched reflective tape  Increased durability
Microfleece lining  Warmth and comfort
Easy stretch side panels  Wear comfort
Covered zippered hand pockets  Keeps out debris and keeps contents secure
Extended back  Protection when bending over
SafetyICON™ on arm  Visual EN Standards icon system
ThermSAFE™ plastic FR zipper  CE Certified
ThermSAFE™ two-way plastic FR zipper  Flexibility

Sizes:  S-3XL
Colour:  HV Yellow/Navy
Fabric specification:  VXS+ Inherent Satin Weave fabric with Waterproof Membrane - 405gms
Product care:  60°C P

Napoleon chest pocket with phone pocket inside
Adjustable cuff with soft cuffing on inside for extra warmth
Adjustable waist strap with ThermSAFE® hook and loop

ProGARM® 7480 COVERALL

FEATURES AND BENEFITS

Mandarin collar  Maximum neck protection
Kneepad pockets  Wear with kneepads for extra comfort
Chest pockets with flaps  Secure storage
Gas monitor loop  Secure fixing point
SafetyICON™ on arm  Visual EN Standards icon system
5cm FR AS reflective tape  Double stitched for longer life
Phone pocket on sleeve with flap  Safe and secure
Velcro® secured cuff tabs  Close fit around wrist or gloves
Side access pockets  With entry inside coverall
ThermSAFE™ plastic FR zippers  CE Certified
Internal elastic 2 Point adjustable waistband  Ensures close fit
Triple stitched side seams  Lifetime quality assurance
Easy-Stretch™ side panels  Maximum wear comfort

Sizes:  S-4XL, Regular leg (31”/80cm)
M-2XL Tall leg (33”/85cm)
Short leg by re-hemming
Colour:  HV Yellow
Fabric specification:  VXS+ HVY250W 250g/m² Woven Inherent Hi-Visibility Fabric
Product care:  60°C P

Double stitched reflective tape to EN20471 Class 3 pattern
Featuring Flame Resistant ThermSAFE® hook and loop
Featuring ThermSAFE™ zipper

SEAM GUARANTEE
HAVING TRIALLED NEARLY EVERY SUPPLIER IN THE UK, ProGARM® WERE CLEAR WINNERS – SHRINKAGE WAS MINIMAL AND THE GARMENT KEPT ITS SHAPE – OVERALL A FANTASTIC PRODUCT.

FEATURES AND BENEFITS

- Triple needle stitch seams for extra longevity
- Internal kneepad pocket to fit ProGARM® 2300 kneepad
- Combat pocket on right leg with SafetyICON™ EN Standard Identification
- Mobile phone pocket
- Side access pockets with flaps
- Extra wide belt loop at rear
- Knee pad pockets
- ThermSAFE™ plastic FR zipper
- Combat pocket with flap
- Mobile phone pocket
- SafetyICON™ on leg pocket
- Rear pockets with flap
- Mobile phone pocket
- ThermSAFE™ jeans button

Sizes:
- 30-52" Regular leg (32"/81cm)
- 30-44" Tall leg (34"/86cm)
- 32-42" Short leg (30"/76cm)

Colour:
- HV Yellow

Fabric specification:
- VXS+ HV250W 250g/m² Woven Inherent Hi-Visibility Fabric

Product care:
- 60°C Machine Wash

EN STANDARDS

ARC

LOI

INHERENT

FABRIC

Fabric

LOI

ARC

HIS VIS YELLOW COLLECTION

Class 1, A1
Pt. 5:2008
Pt. 3:2004
Charge Decay
EBT50=
9.5cal/cm²

A1, B1, C1, E1

Class 2 hi visibility certification

ThermSAFE™ jeans button
Jeans style fastening

Combat pocket with flap: Safe storage space
Kneepad pockets: Wear with kneepads for extra comfort
Mobile phone pocket: Keep your phone safe
Side access pockets with flaps: Protects from debris entry
Extra wide belt loop at rear: Prevents belt riding up
ThermSAFE™ plastic FR zipper: CE Certified
SafetyICON™ on leg pocket: Visual EN Standards icon system
Rear pockets with flap: Secure storage space
Triple stitched side seams: Lifetime quality assurance
Reinforced crotch: Improved longevity
7cm wide reflective tape: Class 2 hi visibility certification
SafetyICON™ on leg pocket: Visual EN Standards icon system
Rear pockets with flap: Secure storage space
Triple stitched side seams: Lifetime quality assurance
Reinforced crotch: Improved longevity
7cm wide reflective tape: Class 2 hi visibility certification
ThermSAFE™ jeans button: Jeans style fastening
HI VIS ORANGE COLLECTION

HI VIS ORANGE COLLECTION

INHERENT PROTECTION
Flame Resistant properties last the lifetime of the fabric and do not wash out

GREAT COMFORT
Breathable, soft to wear and fantastic to the touch

INHERENT PROTECTION

INSTANT EXTINGUISHING PROPERTIES
Ultimate protection against Flame and Arc Flash Hazards

HIGHLY DURABLE
Colourfast with less than 3% washing shrinkage*

*only on certain products

For full Product Matrix outlining EN Standards see page 82
ProGARM® 5290 POLO SHIRT

FEATURES AND BENEFITS

- Enclosed stud placket / Allows quick fastening
- VXS+ blend / Natural feel, comfortable and soft
- Breathable / With good moisture management
- ThermSAFE™ plastic FR poppers / CE Certified
- Knitted collar with tipping / Ensures best appearance after washing
- Contrast colour collar / Stylish and practical
- Rib knit cuffs / Close fit
- SafetyICON™ on arm / Visual EN Standards icon system
- 5cm FR AS reflective tape / Heat applied to improve flexibility

Sizes: S-4XL  Colour: HV Orange

Fabric specification
VXS+ Inherent Pique Fabric, HV Orange - 220gms

Product care:

ProGARM® 5648 SWEATSHIRT

FEATURES AND BENEFITS

- Brushed fleece inner / Winter warmth
- VXS+ blend / Natural feel, comfortable and soft
- Breathable / With good moisture management
- Round neck collar with stretch rib / Smart appearance
- Contrast colour collar / Stylish and practical
- Rib knit cuffs / Close fit
- 5cm stretch rib hem / Best fit around the waist
- SafetyICON™ on arm / Visual EN Standards icon system
- Arm pocket / Useful pocket for phone or small items
- 5cm FR AS reflective tape / Heat applied to improve flexibility

Sizes: S-4XL  Colour: HV Orange

Fabric specification:
VXS+ Inherent Sweat Fabric, HV Orange - 430gms

Product care:
**ProGARM® 4609 JACKET**

**FEATURES AND BENEFITS**

- Mandarin collar: Maximum neck protection
- Vertical chest pocket with zipper: Discreet design
- Gas monitor loop: Secure fixing point
- SafetyICON™ on arm: Visual EN Standards icon system
- 5cm FR AS reflective tape: Double stitched for longer life
- Phone pocket on sleeve with flap: Safe and secure
- Velcro® secured cuff tabs: Class fit around wrist or gloves
- Side access pockets with flaps: Prevents entry of debris
- ThermSAFE™ plastic FR zipper: CE Certified
- Extended back: Protection when bending over
- Double stitched side seams: Lifetime quality assurance
- Easy-stretch side panels: Maximum wear comfort

**Sizes:** S-4XL  **Colour:** HV Orange

**Fabric specification**

VXS+ Inherent Woven Fabric, HV Orange - 360gms

**Product care:**

- 
- 
- 
- 

---

**ProGARM® 4617 TROUSER**

**FEATURES AND BENEFITS**

- Combat pocket with flap: Safe storage space
- Kneepad pockets: Wear with kneepads for extra comfort and safety
- Mobile phone pocket: Keep your phone safe
- Side access pockets with flaps: Protects from debris entry
- Extra wide belt loop at rear: Prevents belt riding up
- ThermSAFE™ plastic FR zipper: CE Certified
- SafetyICON™ on leg pocket: Visual EN Standards icon system
- Rear pockets with flap: Secures storage space
- Triple stitched side seams: Lifetime quality assurance
- Reinforced crotch: Improved longevity
- ThermSAFE™ jeans button: Jeans style fastening
- 5cm FR AS reflective tape: Double stitched for longer life

**Sizes:**

- 30-34" Regular Leg (32”/81cm)
- 30-44" Tall Leg (34”/86cm)
- 32-42" Short Leg (30”/76cm)

**Fabric specification:**

VXS+ Inherent Woven Fabric, HV Orange - 360gms

**Colour:** HV Orange

**Product care:**

- 
- 
- 
- 

---

Adjustable waist fastening for improved fit

Action back for improved comfort

Side pockets with flaps to prevent debris

Reinforced crotch panel for increased strength

Internal kneepad pocket to fit ProGARM® 2500 kneepad

Combat pocket on right leg with SafetyICON™ EN Standard identification
ProGARM® 4691 COVERALL

FEATURES AND BENEFITS

- Mandarin collar: Maximum neck protection
- Knee pad pockets: Wear with knee pads for extra comfort
- Chest pockets: Secure storage
- Gas monitor loop: Secure fixing point
- SafetyICON™ on arm: Visual EN Standards icon system
- 5cm FR AS reflective tape: Double stitched for longer life
- Phone pocket on sleeve with flap: Safe and secure
- Velcro® secured cuff tabs: Close fit around wrist or gloves
- Side access pockets with flaps: With entry inside coverall
- ThermSAFE™ plastic FR zippers: CE Certified
- Internal elastic 2 Point adjustable waistband: Ensures close fit
- Double stitched side seams: Lifetime quality assurance
- Easy-Stretch™ side panels: Maximum wear comfort

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<th>ARC</th>
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Sizes: S-4XL Regular leg (31”/80cm)
M-2XL Tall leg (33”/85cm)

Colour: HV Orange

Product care: 

Fabric specification: VXS+ Inherent Woven Fabric, HV Orange - 360gms

---

SEAM GUARANTEE

- GO/RT tape pattern for trackside workers
- Double stitched ThermSAFE™ reflective tape for longevity
- Internal elasticsated waistband for improved fit

---

WE HAVE HAD THESE TROUSERS FOR OVER 6 MONTHS AND THEY ARE STILL GOING STRONG WHEREAS BEFORE WE HAD TO REPLACE TROUSERS NEARLY EVERY THREE WEEKS!
OUTER GARMENT COLLECTION

INHERENT PROTECTION
Flame Resistant properties last the lifetime of the fabric and do not wash out

GREAT COMFORT
Breathable, soft to wear and fantastic to the touch

HIGHLY DURABLE
Colourfast with less than 3% washing shrinkage* (only on certain products)

INSTANT EXTINGUISHING PROPERTIES
Ultimate protection against Flame and Arc Flash Hazards

For full Product Matrix outlining EN Standards see page 82
**ProGARM® 4252 JACKET & 4385 LINER**

/ OUTER GARMENT COLLECTION

---

**FEATURES AND BENEFITS**

- Two tone design: Practical and stylish
- Chest pockets with flaps: Generous storage space
- Chunky plastic zippers: For heavy duty use
- Storm flap & Velcro® fastening: Keeps the weather out
- Two side pockets and map pockets: Secure storage
- SafetyICON™ on arm: Visual EN Standards icon system
- Velcro® secured cuff tab: Close fit around wrist or gloves
- Phone pocket on sleeve with flap: Safe and secure
- 5cm FR AS reflective tape: Double stitched for longer life
- Internal pocket: With secure Velcro® tab
- Removable hood with toggle fastening: For close fit

**GUARANTEE**

---

**Sizes:** S-3XL  
**Colour:** HV Yellow/Navy

**Fabric specification**

Two layer fabric with waterproof membrane, Hi-Vis Yellow/Navy - 300gms + 250gms

**Product care:**

---

**Quilted Liner**

Note this item is not necessary to meet the requirements of Class 2 Electric Arc Protection - it is an additional layer for warmth. Please request further information from our sales office.

**Sizes:** S-3XL  
**Colour:** Black

---

**ProGARM® 4280 SALOPETTE**

/ OUTER GARMENT COLLECTION

---

**FEATURES AND BENEFITS**

- Shoulder straps with buckles: Fully adjustable
- Phone pocket with flap: Safe and secure
- 5cm FR AS reflective tape: Extra visibility
- Pocket on chest with flaps: Additional storage space
- SafetyICON™: Visual EN Standards icon system
- Chunky plastic zipper: For heavy duty use

**GUARANTEE**

---

**Sizes:** S-3XL  
**Colour:** Navy

**Fabric specification:**

Two layer fabric with waterproof membrane, Navy - 300gms + 250gms

**Product care:**

---

**Chest pocket with Velcro® fastening flaps**

**Shoulder straps with adjustable snap-lock connectors**

**Stitched reflective tape for durability**
**ProGARM® 9750 JACKET & 9751 HELMET HOOD**

**FEATURES AND BENEFITS**
- Two tone design: Practical and stylish
- Elasticated inner cuffs: Windproofing
- Storm flap: Windproofing
- Taped seams: Waterproof and windproof
- Fully adjustable, fold away hood with Velcro®: Safety and comfort
- Radio loop: Attaching point on left breast
- Inner pockets on right breast: Storages space
- Mandarin collar: Maximum neck protection
- 50mm double stitched reflective tape: Increased durability
- Fully lined: Warmth and comfort
- Easy-stretch side panels: Wear comfort
- Extended back: Protection when bending over
- Covered zippered hand pockets: Keeps out debris and keeps contents secure
- No seams on shoulder: Improved durability as well as comfort whilst wearing a harness
- SafetyICON™ on arm: Visual EN Standards icon system

---

**Specifications**

- **Sizes:** S-4XL
- **Colour:** HV Yellow/Navy
- **Fabric specification:**
  - Outer layer: VXS+ Inherent special weave fabric with waterproof membrane - 395gms
  - Lining layer: VXS+ Inherent woven fabric - 200gms
- **Product care:**
  - Wash at 30°C
  - Iron maximum 110°C
  - Do not dry clean

---

**9751 HELMET HOOD**

To be ordered separately

---

**ProGARM® 9880 WATERPROOF TROUSER**

**FEATURES AND BENEFITS**
- 70mm double stitched reflective tape: Increased durability
- Combat pocket with phone pocket: Convenience and storage space
- 2 side pockets: Storage space
- Side access: For use as overtrousers
- Fully lined: Warmth and comfort
- Suspenders: Removable and adjustable
- Suspender back plate: Adjustable for comfort
- SafetyICON™ on leg: Visual EN Standards icon system
- ThermSAFE™ plastic FR zipper: CE Certified
- Extra wide belt loop at rear: Prevents belt riding up

---

**Specifications**

- **Sizes:** S-4XL
- **Colour:** HV Yellow/Navy
- **Fabric specification:**
  - Outer layer: VXS+ Inherent special weave fabric with waterproof membrane - 395gms
  - Lining layer: VXS+ Inherent woven fabric - 200gms
- **Product care:**
  - Wash at 30°C
  - Iron maximum 110°C
  - Do not dry clean

---

**EN STANDARDS**

**FABRIC**

**LOI**

**ARC**

**Pt. 5:2008**

**Pt. 3:2004**

Charge Decay

\[
\text{ATPV} = 47 \text{cal/cm}^2
\]

Class 2

Class 2, A1

Class 2 A1, B1, C1, D2, E3, F1

Type PB (6)

---

**Sizes:** S-4XL

**Colour:** HV Yellow/Navy

**Fabric specification:**

- Outer layer: VXS+ Inherent special weave fabric with waterproof membrane - 395gms
- Lining layer: VXS+ Inherent woven fabric - 200gms

**Product care:**

- Wash at 30°C
- Iron maximum 110°C
- Do not dry clean

---

**SEAM GUARANTEE**

- Double stitched ThermSAFE™ reflective tape for longevity
- Removable braces

---

**www.progarm.com**

+44 (0)1482 679600 info@progarm.com
### ProGARM® 9440 JACKET & 9441 HELMET HOOD

<table>
<thead>
<tr>
<th>EN STANDARDS</th>
<th>LOI</th>
<th>ARC</th>
<th>FABRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27.0%</td>
<td>4</td>
<td>VXS+ Inherent</td>
</tr>
</tbody>
</table>

#### FEATURES AND BENEFITS
- Elasticated inner cuffs / Windproofing
- Storm flap / Windproofing
- Taped seams / Waterproof and windproof
- Fully adjustable, fold away hood with Velcro® / Safety and comfort
- Radio loop / Attaching point on left breast
- Inner pockets on right breast / Storage space
- Mandarin collar / Maximum neck protection
- 50mm double stitched reflective tape / Increased durability
- Fully lined / Warmth and comfort
- Easy-stretch side panels / Wear comfort
- Extended back / Protection when bending over
- Covered zippered hand pockets / Keeps out debris and keeps contents secure
- No seams on shoulder / Improved durability as well as comfort whilst wearing a harness
- SafetyICON™ on arm / Visual EN Standards icon system

#### Product care:
- Fabric specification:
  - Outer layer: VXS+ Inherent special weave fabric with waterproof membrane - 395gms
  - Lining layer: VXS+ Inherent woven fabric - 200gms

#### Dimensions:
- Sizes: S - 4XL
- Colour: HV Orange

### ProGARM® 9660 WATERPROOF TROUSER

#### EN STANDARDS
- LOI | ARC | FABRIC |
- 27.0% | 4   | VXS+ Inherent |

#### FEATURES AND BENEFITS
- 70mm double stitched reflective tape / Increased durability
- Combat pocket with phone pocket / Convenience and storage space
- 2 side pockets / Storage space
- Side access / For use as overtrousers
- Fully lined / Warmth and comfort
- Suspender back plate / Adjustable for comfort
- SafetyICON™ on leg / Visual EN Standards icon system
- ThermSAFE™ plastic FR zipper / CE Certified
- Extra wide belt loop at rear / Prevents belt riding up

#### Product care:
- Fabric specification:
  - Outer layer: VXS+ Inherent special weave fabric with waterproof membrane - 395gms
  - Lining layer: VXS+ Inherent woven fabric - 200gms

#### Dimensions:
- Sizes: S-4XL
- Colour: HV Orange

#### SEAM GUARANTEE
- Replaceable hood
- Velcro® fastening tabs on cuffs and back
- Napoleonic pocket covered behind storm flap

#### Side access pockets with flaps
- Expandable ankle opening with zipper
- Removable braces

---

www.progarm.com

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---
ACCESSORIES & OTHER GARMENTS

INHERENT PROTECTION
Flame Resistant properties last the lifetime of the fabric and do not wash out

GREAT COMFORT
Breathable, soft to wear and fantastic to the touch

HIGHLY DURABLE
Colourfast with less than 3% washing shrinkage*

INSTANT EXTINGUISHING PROPERTIES
Ultimate protection against Flame and Arc Flash Hazards

*only on certain products

For full Product Matrix outlining EN Standards see page 82

ACCESSORIES & OTHER GARMENTS
**Features and Benefits**

**ProGARM® 2240 FOAM KNEEPADS**

- Sizes: W: 145mm x L: 235mm
- Colour: Black

**ProGARM® 2000 KIT BAG**

- Sizes: 50cm x 25cm x 25cm (34 litres)
- Colour: Black

**ProGARM® 2678 ARC GLOVES**

- Sizes: L, XL, 2XL
- Colour: Tan

**EN Standards**

- EN ISO 11612 Certified: Optimum safety
- Notched sides: For maximum flexibility
- Excellent breathability: Due to air holes in the foam
- High impact absorption: From high grade cellular rubber
- Wash tested to ISO 15797, 12 cycles: Perfect stability

---

**Features and Benefits**

**ProGARM® 8210 BASELAYER TOP**

- Extra soft fabric: Comfortable to wear
- Thumb hole: Extra added hand protection
- Extended back: Added protection
- Contrast threads: Stylish
- L-shaped seams: Wearer comfort
- Fully machine washable: Wearer’s convenience

**Sizes:** S-4XL  
**Colour:** Navy

**Fabric Specification:**  
VXS+ Inherent jersey fabric, Navy - 220gms

**Product Care:** [ ]

**ProGARM® 8220 BASELAYER LEGGINGS**

- Extra soft fabric: Comfortable to wear
- Contrast threads: Stylish
- Fully machine washable: Wearer’s convenience

**Sizes:** S-4XL  
**Colour:** Navy

**Fabric Specification:**  
VXS+ Inherent jersey fabric, Navy - 220gms

**Product Care:** [ ]
**ProGARM® 8100 BALACLAVA**

**FEATURES AND BENEFITS**
- Extra soft fabric / Comfortable to wear
- Contrast threads / Stylish
- Elastic fabric / Fits all shapes and sizes

**EN STANDARDS**

**FABRIC**

**Sizes:** One Size
- Colour: Navy

**Fabric specification**
- VXS+ Inherent jersey fabric, Navy - 220gms

**Product care:**
- Machine washable
- Tumble dry safe
- Iron dry
- Do not bleach
- Do not dry clean

**FEATURES AND BENEFITS**
- Extra soft fabric / Comfortable to wear
- Contrast threads / Stylish
- Elastic fabric / Fits all shapes and sizes

**EN STANDARDS**

**FABRIC**

**Sizes:** One Size
- Colour: Navy

**Fabric specification**
- VXS+ Inherent jersey fabric, Navy - 220gms

**Product care:**
- Machine washable
- Tumble dry safe
- Iron dry
- Do not bleach
- Do not dry clean

**ProGARM® 8300 SNOOD**

**FEATURES AND BENEFITS**
- Extra soft fabric / Comfortable to wear
- Contrast threads / Stylish
- Elastic fabric / Fits all shapes and sizes

**EN STANDARDS**

**FABRIC**

**Sizes:** One Size
- Colour: Navy

**Fabric specification**
- VXS+ Inherent jersey fabric, Navy - 220gms

**Product care:**
- Machine washable
- Tumble dry safe
- Iron dry
- Do not bleach
- Do not dry clean

**ProGARM® 8400 HELMET LINER**

**FEATURES AND BENEFITS**
- Extra soft fabric / Comfortable to wear
- Contrast threads / Stylish
- Elastic fabric / Fits all shapes and sizes

**EN STANDARDS**

**FABRIC**

**Sizes:** One Size
- Colour: Navy

**Fabric specification**
- VXS+ Inherent jersey fabric, Navy - 220gms

**Product care:**
- Machine washable
- Tumble dry safe
- Iron dry
- Do not bleach
- Do not dry clean

**PROGARM® 2660 ARC CLASS 1 HELMET & 2668 VISOR**

**IN ACCORDANCE WITH:**
- EN50365 : 2002

**PRODUCT FEATURES**
- Stroke absorption after conditioning in temperatures of (-30º) and (0º)
- Resistance to penetration after conditioning in temperatures of (-30º) and (+50º)
- Live working symbol (Two triangles)
- Working temperature range: -30°C to +50°C
- Wheel ratchet adjustment
- Adjustable head circumference from 53-63cm
- Two level height adjustment feature
- Short peak
- 4 point webbing harness
- Accessory slot for ear defenders
- Electrical insulation (Class 0) 1000V AC, 1500V DC
- Resistance to Molten Metal Splash (MM)
- Resistance to Lateral Deformations (LD)

**IN ACCORDANCE WITH:**
- PNEN166 : 2001
- GS-ET 29 : 2010

**2668 REPLACEMENT VISOR**

**Lifetime:** 5 years
- **Sizes:** One Size
- **Colour:** White (other colours available)

**FEATURES AND BENEFITS**
- Batch number date stamp on helmet shell
- Chin strap fastening with quick release buckle
- Face shield retracts to protect from damage

**PRODUCT FEATURES**
- Stroke absorption after conditioning in temperatures of (-30º) and (0º)
- Resistance to penetration after conditioning in temperatures of (-30º) and (+50º)
- Live working symbol (Two triangles)
- Working temperature range: -30°C to +50°C
- Wheel ratchet adjustment
- Adjustable head circumference from 53-63cm
- Two level height adjustment feature
- Short peak
- 4 point webbing harness
- Accessory slot for ear defenders
- Electrical insulation (Class 0) 1000V AC, 1500V DC
- Resistance to Molten Metal Splash (MM)
- Resistance to Lateral Deformations (LD)

**IN ACCORDANCE WITH:**
- PNEN166 : 2001
- GS-ET 29 : 2010

**To be ordered separately**
**PROGARM® 2680 ARC CLASS 2 HELMET & 2669 VISOR**

**IN ACCORDANCE WITH:**
- EN50365 : 2002

**PRODUCT FEATURES**
- Stroke absorption after conditioning in temperatures of (-30°C) and (0°C)
- Resistance to penetration after conditioning in temperatures of (-30°C) and (+50°C)
- Protection against Molten Metal Splash (MM)
- Protection against Lateral Deformations (LD)
- Protection against electric shock (class 0) 1000V AC, 1500V DC
- Wheel ratchet adjustment
- Adjustable head circumference from 53-63cm
- Two level height adjustment feature
- Short peak
- 4 point webbing harness
- Accessory slot for ear defenders

**LIFETIME:** 4 years  
**SIZES:** One Size  
**COLOUR:** White (other colours available)

**2669 REPLACEMENT VISOR**
- Chin strap fastening with quick release buckle
- Ratchet mechanism on rear of helmet
- Batch number date stamp on helmet shell

**PROGARM® 2690 ARC 24CAL HELMET & 2667 VISOR**

**IN ACCORDANCE WITH:**
- ANSI/ISEA Z89.1-2014
- ANSI/ISEA Z87.1-2015
- ASTM F2178-12

**PRODUCT FEATURES**
- Force transmission after conditioning in temperatures of (-18°C) and (+49°C)
- Apex penetration after conditioning in temperatures of (-18°C) and (+49°C)
- Protection against electric shock (class 0)
- Wheel ratchet adjustment
- Two level height adjustment feature
- Short peak
- 4 point webbing harness
- Accessory slot for ear defenders

**LIFETIME:** 4 years  
**SIZES:** One Size  
**COLOUR:** White (other colours available)

**2667 REPLACEMENT VISOR**
- Chin strap fastening with quick release buckle
- Ratchet mechanism on rear of helmet
- Batch number date stamp on helmet shell

**IN ACCORDANCE WITH:**
- PNEN516 : 2001
- GS-ET 29 - 2010

**2690 REPLACEMENT VISOR**
- Chin strap fastening with quick release buckle
- Ratchet mechanism on rear of helmet
- Batch number date stamp on helmet shell

**IN ACCORDANCE WITH:**
- ANS/ISEA Z89.1-2014
- ANS/ISEA Z87.1-2015
- ASTM F2178-12

**OTHER STANDARDS:**
- ANSI/ISEA Z89.1-2014
- ANSI/ISEA Z87.1-2015
- ASTM F2178-12

**2667 REPLACEMENT VISOR**
- Chin strap fastening with quick release buckle
- Ratchet mechanism on rear of helmet
- Batch number date stamp on helmet shell

**IN ACCORDANCE WITH:**
- PNEN516 : 2001
- GS-ET 29 - 2010

**2690 REPLACEMENT VISOR**
- Chin strap fastening with quick release buckle
- Ratchet mechanism on rear of helmet
- Batch number date stamp on helmet shell

**IN ACCORDANCE WITH:**
- ANS/ISEA Z89.1-2014
- ANS/ISEA Z87.1-2015
- ASTM F2178-12

**2667 REPLACEMENT VISOR**
- Chin strap fastening with quick release buckle
- Ratchet mechanism on rear of helmet
- Batch number date stamp on helmet shell

**IN ACCORDANCE WITH:**
- PNEN516 : 2001
- GS-ET 29 - 2010
ProGARM® 2676 EAR MUFFS

PRODUCT DESCRIPTION
Fit adjustable ear muffs for attachment to the ProGARM® helmets, soft PVC cushions. SNR: 23dB. CE EN 352-3 Certified.

ProGARM® 2674 HEAD HARNESS

PRODUCT DESCRIPTION
Complete replacement 4-point harness with textile webbing, front and rear sweatbands and ratchet mechanism for practical and easy one-hand size adjustment.

ProGARM® 2664 CHIN STRAP

PRODUCT DESCRIPTION
Replacement chin strap with quick release fasteners adjust and 4-point fitting

ProGARM® 2662 FRONT SWEATBAND

PRODUCT DESCRIPTION
Replacement soft velour and foam sweatband for comfort and moisture absorption, Velcro® fastening.

ProGARM® 2666 BACK SWEATBAND

PRODUCT DESCRIPTION
Replacement soft velour and foam sweatband for comfort and moisture absorption, Velcro® fastening.

ProGARM® 2670 HEADLIGHT

PRODUCT DESCRIPTION
LED headlight with super bright white LEDs powered by 3 x AAA batteries (not included). Vertically adjustable beam, easily and stably mounted on the helmet by elastic strap and Velcro® fastening.
**ProGARM® 2682 ZONE EAR DEFENDER ADAPTORS**

**PRODUCT DESCRIPTION**
Adapters to fit the popular zone ear defenders to the Arc helmets.

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**ProGARM® 2677 STORAGE BAG**

**PRODUCT DESCRIPTION**
Storage bag to transport and protect ProGARM® helmet and other accessories.

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**ProGARM® 2672 VISOR CLOTH**

**PRODUCT DESCRIPTION**
Replacement soft cotton cloth for cleaning ProGARM® visors.

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THE ProGARM® FR GARMENTS ARE OUTSTANDING - WE HAVE WASHED THEM 50 TIMES INCLUDING PUTTING THEM THROUGH THE TUMBLE DRYER AND SHRINKAGE IS LESS THAN 3% AS STATED!
LAUNDRY OF ProGARM® VXS+ GARMENTS

TRIED AND TESTED

NOT ALL FABRICS ARE ALIKE... SPECIFY ProGARM® VXS+ FABRIC

Ensuring that garments perform wash after wash is an essential part of the criteria when developing a new product, and our garments have undergone wash trials at several commercial laundry companies on behalf of end-user requirements. The wash characteristics of the fabric is of key importance with particular emphasis on colour fastness, tear and tensile strengths, pilling resistance and dimensional change (shrinkage).

Our top selling fabric has been certified to EN11612 after 50 industrial wash cycles at 75°C and tunnel drying at 150°C for 5 minutes according to ISO 15797:2004.

In addition to this, the detail of each garment is key and with this in mind, we use branded reflective tapes and components from names including Velcro® and ThermSAFE™. All test reports on our garments are performed after defined wash cycles in accordance with the EN Standard, and in the case of some of our ThermSAFE™ reflective tapes, the testing is performed after 50 industrial wash cycles and drying procedures.

If you intend to commercially wash these garments, we are happy to discuss this with your laundry partner that the quality, benefits and flexibility of wearing ProGARM® Flame Resistant garments can be fully realised.

DURABILITY

ProGARM® VXS+ Fabrics maintain excellent colour fastness and appearance even after multiple washes.

Extensive product trials have been carried out with various end users and laundry companies to clearly demonstrate the quality and superiority of the ProGARM® garments and the VXS+ Fabric blends when compared against other products and fabrics in the market.

Many aramid fabrics are sensitive to high pH values in detergents and as such they are more susceptible to colour change during the industrial laundry process. However, the dye processes of the VXS+ blends allow for optimum wash performance in addition to low shrinkage and quick-dry properties.

Colour performance is measured on a level of 1 to 5 with 5 being the maximum. Note: Garments should be washed according to the care label.

<table>
<thead>
<tr>
<th>INDUSTRIAL WASHING PROCEDURE ACCORDING TO ISO 15797</th>
<th>VXS+ 200V 2000/M²</th>
<th>ARAMID FABRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>WASHING (75ºC) AND TUMBLE DRYING (80ºC)</td>
<td>COLOUR FASTNESS AFTER INDUSTRIAL WASHING (ISO 105A02)</td>
<td></td>
</tr>
<tr>
<td>INITIAL</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25X</td>
<td>4-5</td>
<td>1-2</td>
</tr>
<tr>
<td>50X</td>
<td>3-4</td>
<td>1</td>
</tr>
</tbody>
</table>

Some fabrics and accessories within the ProGARM® product range have been tested to this standard for industrial washing in accordance with the correct procedures. For further details, please discuss with your ProGARM® representative.

ALL ABOUT WASHING

WASHING METHODS

EN ISO 6330; 2012 DOMESTIC TEXTILES – DOMESTIC WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING

This international standard defines the washing and drying procedures for textiles being washed in domestic machinery. Considerations are made for wash loads, drying procedures, chemicals and detergents and many other variables. The standard was reviewed in 2012 after 10 years of amendments with industry influencers to ensure the standard was based on global practices.

ProGARM® garments meet this standard as a minimum with many fabrics and accessories within our collection also tested to the Industrial Wash standard EN ISO15797.

EN ISO15797; 2004 INDUSTRIAL TEXTILES – INDUSTRIAL WASHING AND FINISHING PROCEDURES FOR TESTING OF WORKWEAR

This international standard defines the suitability of textiles for industrial washing. Considerations are made for use of industrial washing machinery, larger wash loads, more demanding wash detergents, washing procedures (with hotter and tougher temperatures) and for 2 drying procedures including tunnel drying with temperatures up to 160°C.

INDEPENDENT LAB TESTING

All fabrics within the ProGARM® VXS+ range are extensively tested before being released to market and as part of the requirements to achieve EN certification. These tests include pilling, abrasion, tear, tensile, colour retention, wash performance and weight in addition to the flame performance tests that are required. As a further step we also test garments and fabrics on the market to ensure that the ProGARM® products remain at the cutting edge.
**ThermSAFE™ COMPONENTS**

**HIGH QUALITY CERTIFIED COMPONENTS**

Every component within a ProGARM® garment is carefully selected and tested to ensure that the performance of the finished garment is not affected by an inferior component. The ThermSAFE™ brand of components gives you confidence that we have tested and approved each item for use in Flame Resistant garments and in the heavy work environments and washing cycles it will undergo during its lifetime.

**ThermSAFE™ ZIPPERS**

Our plastic Military-Grade zippers feature 6mm moulded plastic teeth using FR nylon 6.6 grade material for heat resistance for 5 minutes at 185°C according to ISO17493. The permanent FR polyester tape also meets the same FR requirements.

**ThermSAFE™ FR REFLECTIVE TAPE**

Our most popular tape is tested to 50 x 60° washes and performs well in industrial washing environments. (We also offer an industrial wash tape tested to higher standards of washing and drying cycles should this be required in any garment).

**ThermSAFE™ STRETCH TAPE**

ThermSAFE™ stretch tape is the latest ProGARM® development used on many of the knitted garments in the range. The unique stretch properties of this tape ensure improved comfort of the garments.

**ThermSAFE™ POPPERS**

These plastic poppers are made using a special blend of polymers to ensure that they do not fail to function after exposure to heat. We have independently tested this unique popper and now feature it on the majority of our workwear trousers.

**ThermSAFE™ JEANS BUTTON**

This jeans button is made using a special blend of polymers to ensure that it does not fail to function after exposure to heat. We have independently tested this unique button and now feature it on the majority of our workwear trousers.

**ThermSAFE™ THREAD**

Some Flame Resistant garment manufacturers of Arc Flash protective garments use non-aramid threads in their main structural seams. With ThermSAFE™ aramid threads will not melt below 265°C offering you maximum protection.

**ThermSAFE™ VELCRO®**

We only use genuine Velcro® in our garments for maximum performance and ‘grab’! This special Velcro® is also Flame Resistant and in laboratory trials has been tested to not present any danger in antistatic environments.

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**PPE DIRECTIVE AND CARE LABELS**

Personal Protective Equipment (PPE) is equipment that protects the wearer against one or more health or safety risks in the work environment. In order to sell PPE in the EU, it must comply with the European Directive that regulates PPE products (94/66/EEC). This directive regulates requirements concerning the function, marking, technical documentation and also the CE marking process.

In accordance with the directive, PPE is divided into three categories as follows:

**CATEGORY 3**

Protective equipment of complex design that protects the wearer against dangers to life or serious permanent injury, where the user cannot detect the risk in time. This PPE must be certified by an external inspection body and is subject to an EC quality assurance system. Items in this category carry a digit number after the CE marking, which indicates the independent body regularly checks the PPE for continuous conformity.

Protective equipment in categories 2 and 3 are Type Approved by a notified body and adapted to the majority of different harmonised standards. In order to sell PPE products, they must be CE marked. The CE mark means that a product is Type Approved and complies with the requirements that have been set for PPE in the Directive 89/686/EEC and therefore can be sold in all EU and ESS countries. All of ProGARM®’s PPE products comply with the requirements that are set in accordance with the directive.

**PLEASE NOTE**

Any garment correctly certified and CE marked should display the relevant symbol for the standards. Some manufacturers claim that the garment meets the requirements but only the fabric and not the complete garment may be certified. This is clear by the Care Label of the garment which will not show the EN symbol but may simply note in text the standard to which the fabric conforms.

All ProGARM® garments are fully certified to the standards for which we claim and a sample Care Label is shown below.

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**Care Label in each garment showing clearly to which standards the garments is certified**

**CE Marking**

- **EN Standards to which the garment meets**
- **Wash Care Instructions**
- **Fabric Compositions**
- **Clear Washing Care Symbols**
- **Batch Number For Traceability**
- **Garment Edition Number**
**Limiting Oxygen Index (LOI)**

Limiting Oxygen Index (LOI) can have a great impact on the capabilities of a fabric and garment, it is good to have an understanding of how it impacts the Flame Resistant and Arc properties of a fabric.

Our fabrics use a self-extinguishing fibre, which means when it comes into contact with an ignition source it emits an inert gas which pushes oxygen away and thus prevents the continuation of flaming and spread of any fire. The fabric works in a way similar to a fire extinguisher by removing one of the three elements vital for fire, in this case oxygen, and thus removes the ignition source. This mechanism is instantaneous and stops as soon as the flame is no longer present.

This powerful Flame Resistant mechanism can be illustrated further by studying Limiting Oxygen Index (LOI). LOI is the amount of oxygen you need in an atmosphere for a material to ignite. In our atmosphere there is 21% oxygen, so anything which has an LOI of less than 21 will burn readily, such as cotton which has an LOI of 17.

Not only do ProGARM® garments meet these requirements but in many cases they exceed what is required.

We have listed here the most popular EN Standards that relate to the garments we offer in our collection, with simple explanations. For the actual standard terminology, the relevant BSI document should be referred to and there are available for purchase from BSI British Standards Institute http://shop.bsigroup.com or other similar websites.

For further information on EN Standards and an explanation of how these fit into your work environments, or for an assessment of your current garments, please contact our Sales Office on 01482 679680.
IEC 61482-2
PROTECTIVE CLOTHING AGAINST THE THERMAL HAZARDS OF AN ELECTRIC ARC

ProGARM® produces safety garments that protect workers against the thermal Hazards of an Electric Arc. Each garment style is carefully designed to offer the maximum protection whilst ensuring comfort and outstanding durability. As Arc Flash garments come under the requirements of Category 3 Protective Clothing, these garments are manufactured under Article 118 Quality Control Procedures.

WHAT IS AN ELECTRIC ARC?

An Electric Arc and the Arc Flash created is an extremely dangerous extreme discharges of voltage or electrical current from equipment including switchgear, transformers and heavy electrical equipment. The arc generates a high level of energy for a short time (up to 1 second). The intense heat can create temperatures as high as 19,000°C and it also produces electric shock, force and large quantities of thermal radiant energy.

WHAT IS THE RISK?

In any situation where your employees are working with electricity, an Arc Flash can occur and thus the maximum energy of default quantities of thermal radiant energy. The arc flash generated can be extremely dangerous. This can ignite the surrounding equipment and materials.

EXPLAINING THE DIFFERENT TESTS

ISO 11611 has two classes - if the fabric passes all the tests, it is designated as Class 1, otherwise it is Class 2. For EN 531A, the flame is applied either vertically or horizontally to the fabric sample for 10 seconds. To pass the test, the after-flame and smoulder times and formation of holes must be within the tolerances (set in the standard). This test is also used for EN 531. The application of a flame can take place in two ways; in procedure A (leads to Class A1), the flame is applied horizontally (similarly to EN 670 and EN 531) in procedure B (leads to Class A2); the flame is applied laterally.

ONCE THE FABRIC CAN WITHSTAND THE THERMAL HAZARD FROM THE ARC, THE FABRIC CAN THEN BE USED TO PROTECT THE USER FROM THE ARC FLASH.

IEC 61482-1-2:2007 ‘BOX ARC’ TEST METHOD

The ‘Box Arc’ test method (fabric classification and garment test) is based on the original European method described in ENV 50356, with a heat transfer measurement. Materials or assemblies are classified as Class 1 (≤ 45°C) or Class 2 (75°C). During this test, a fabric sample is exposed to an electric arc produced by a 4kA or 7kA short circuit. In the test, the arc does not last any longer than 500ms. The amount of heat transmitted through the sample is measured during and after the test. On the basis of the resulting data and a Stoll curve, the length of time it would take to cause the onset of second-degree burns is subsequently determined. Samples are also assessed for after-flaming, hole formation, melting, etc.

GARMENT TESTING & FABRIC TESTING

It is important to note that not only the fabric should be tested for conformance to the Arc Flash Standard, but also the complete garment or garment assembly itself. The garment test is not testing for energetic value but is testing to ensure that the garment structure remains intact after the arc exposure and that components such as zippers and buttons are still functional and do not contribute further injury to the wearer by melting or heat transfer.

LIMITATIONS OF USE

With arc protection, the environmental conditions and the risks at the working site should be regarded. For example a test under the standard using a 4kA test current (Class 1) subjects the garment/fabric to an incident energy of 135 kJ/m2 ± 56 kJ/m2 (3.2 ± 1.2 cal/cm2) over a 500ms exposure at 18-28°C at 45-75% RH. If the working environment deviates from this temperature/humidity range the level of protection may be reduced. Exposure to higher incident energies or longer duration arcs may result in the garment providing insufficient protection. Therefore risk assessments should be conducted prior to live working.

For full body protection, the protective clothing shall be worn in the classed state and other suitable protective equipment (e.g. helmet with protective face screen, protective gloves and footwear) shall be used. No garments such as shirts, undergarments or underwear should be used which melt under arc exposures – e.g. made of polyamide, polyester or acrylic fibres. For maximum protection against Arc Flash Exposure garments should be worn as part of a layering system i.e. in conjunction with a shirt or other underwear.

REPAIR INSTRUCTIONS

Warning: tears to Arc Flash certified garments should not be repaired by the user, a flameable test flameproof thread or heat resistant applicable piece likely to melt would be very dangerous in the event of exposure to flame. Should there be any need to repair a garment, please contact ProGARM® for details on how this is best undertaken.

IEC 61482-1-2:2009 PERFORMANCE & DESIGN REQUIREMENTS

Performance requirements for materials and design requirements for garments, plus marking and user information. This part of IEC 61482 is applicable to protective clothing used for energetic value but is testing to ensure that the garment structure remains intact after the arc exposure and that components such as zippers and buttons are still functional and do not contribute further injury to the wearer by melting or heat transfer.

IEC 61482-2:2009 PERFORMANCE & DESIGN REQUIREMENTS

ProGARM® produces safety garments that are certified in accordance with this EN Standard and are designed to protect workers in welding processes. Parts of this EN Standard are also used in conjunction with the Arc Flash Standard for which ProGARM® has built an enviable reputation for high performance garments.

ABOUT THIS EN STANDARD

Within this EN Standard is a series of tests – the most important of which are described in ISO 6942, ISO 9100, ISO 15025 and EN 1149-2. ISO 11611 has two classes – if the fabric passes all the tests, it is designated as Class 1 and if the fabric receives a Class 2 rating for the ISO 6942 and ISO 9150 tests, it is designated as Class 2.

CLASS 1 - Lower Hazard Welding Applications

CLASS 2 - Higher Hazard Welding Applications

EN ISO 11611
PROTECTIVE CLOTHING FOR WELDING AND ALLIED PROCESSES

ProGARM® produces safety garments that are certified in accordance with this EN Standard and are designed to protect workers in welding processes. Parts of this EN Standard are also used in conjunction with the Arc Flash Standard for which ProGARM® has built an enviable reputation for high performance garments.

ISO 9150: Determining the behaviour of fabrics when exposed to small splatters of molten metal. In this test, droplets of molten metal are spatulated on a vertically suspended fabric sample. The number of droplets it takes to cause an increase in temperature of 60°C on the reverse side of the sample is determined. This test also has two classes as follows:

CLASS 1 - 15 droplets of molten metal

CLASS 2 - 25 droplets of molten metal.

ISO 10025: Test method for limited flame spread. The test consists of applying a flame to a fabric sample for 15 seconds. To pass the test, the after-flame and smoulder times and formation of holes must be within the tolerances (set in the standard). This test is also used for EN 531A. The application of a flame can take place in two ways; in procedure A (leads to Class A1), the flame is applied horizontally (similarly to EN 670 and EN 531) in procedure B (leads to Class A2); the flame is applied laterally.

IEC 1149-2: This is a test method for measuring the electrical resistance of a fabric sample and determining whether an electrical charge passes through the sample from the outside to the inside. For further information on this EN Standard please refer to the EN1149 section.

TYPICAL EXAMPLES OF PROCESSES VERSUS CLASS OF CLOTHING

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>CLASS 1</th>
<th>CLASS 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding</td>
<td>Gas welding</td>
<td>MMA welding</td>
</tr>
<tr>
<td></td>
<td>TIG welding</td>
<td>Shielded electrode MMA welding</td>
</tr>
<tr>
<td></td>
<td>MIG welding</td>
<td>Plasma cutting</td>
</tr>
<tr>
<td></td>
<td>Micro plasma welding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soldering brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spot welding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shielded electrode MMA welding</td>
<td></td>
</tr>
</tbody>
</table>

CRITERIA FOR CHOICE ON THE BASIS OF THE TYPE OF PROCESS

CLASS 1
- Operating machines, e.g:
  - Oxygen cutting machines
  - Plasma cutting machines
  - Resistance pressure welding machines
  - Thermal spraying
  - Welding tables

CLASS 2
- Operating machines, e.g:
  - In enclosed spaces
  - When welding/cutting operations require reaching above head height or take place in comparable difficult positions

CRITERIA FOR CHOICE ON THE BASIS OF THE TYPE OF WORK

CLASS 1
- Operating machines, e.g:
  - Oxygen cutting machines
  - Plasma cutting machines
  - Resistance pressure welding machines
  - Thermal spraying
  - Welding tables

CLASS 2
- Operating machines, e.g:
  - In enclosed spaces
  - When welding/cutting operations require reaching above head height or take place in comparable difficult positions
EN ISO 20471
HIGH VISIBILITY CLOTHING

This international standard specifies the requirements for clothing designed to emphasise the wearer’s presence visibly in order to make the wearer more noticeable in hazardous situations during the day and at night (illumination in car headlight). It has replaced EN 471 which has now been withdrawn.

THE CONTENTS OF THIS EN STANDARD

This standard’s scope is to define safety clothing used to protect the wearer’s torso and have either reflective strips about the sleeves positioned in a variety of different ways; Class 3 garments must cover between 2 reflective strips must be at least 50 mm. The distance garment). The reflective strips must be 50 mm wide and the space between the strips must be at least 5 mm. The distance (from the ‘end’ of the garment (e.g. the end of a trouser leg) to the reflective strip must also be at least 50 mm. Reflective strips can be positioned in a variety of different ways. Class 3 garments must cover the wearer’s torso and have either reflective strips about the sleeves or full length trouser legs.

EN ISO 14116
PROTECTION AGAINST HEAT & FLAME, LIMITED FLAME SPREAD

This standard replaces the withdrawn EN343. While the standard does deal with the issue of flame resistance to some extent, it is arguably more suited to outerwear that would usually be worn over other protective garments. For this reason ProGARM® has opted to meet EN11612 which offers a higher standard of protection.

Clothing manufactured to this standard is made from Flame Retardant materials so that if the material comes into contact with a flame, it will only continue to burn for a limited amount of time. After removal from the flame, the material will stop burning. Clothing in this category should not be worn against direct heat, radiant heat, molten metal or similar high-risk hazards.

The classification is derived from the number of square metres of fluorescent fabric and the number of square metres of reflective strip incorporated in a garment.

<table>
<thead>
<tr>
<th>FLUORESCENT MATERIAL</th>
<th>CLASS 1</th>
<th>CLASS 2</th>
<th>CLASS 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.14</td>
<td>0.50</td>
<td>0.80</td>
<td></td>
</tr>
</tbody>
</table>

EN ISO 11612
CLOTHING TO PROTECT AGAINST HEAT & FLAME

ProGARM® produces garments to protect wearers against heat & flame in accordance with this European Standard. This standard replaces the withdrawn EN341 standard and shows our continuous commitment to offer garments certified to the latest specifications.

ABOUT THIS EN STANDARD

The requirements apply to clothing intended for a wide range of applications which offer limited flame spread and provide protection against various hazards including radiant heat, convective heat and splatters of molten metal. The pictogram is the same as the withdrawn EN341 standard. There are several fabric tests within this EN Standard and the results of the tests are represented by the prefix letters A, B, C, D, E and F. A number after these letters indicates the performance of the fabric within this test. If a [0] is shown, then the fabric has not been tested or does not achieve the lowest value attainable with the test.

FABRIC REQUIREMENTS

General Requirement: The mechanical strength and heat resistance at a temperature of 180°C: the material shall not ignite or melt and shall not shrivel by more than 5%.

EXPLAINING THE DIFFERENT TESTS AND CODES

LETTER A (EN 10252)

This test consists of applying a flame to a fabric sample for 10 seconds. To pass the test, the afterflame and smoke times and formation of holes must be within the tolerances within the standard. The application of a flame can take place in two ways:

- 1.2.2.4: 4 < 10 seconds, 1.2.2.2: 10 < 20 seconds, 1.2.2.3: 21 seconds and longer

Letter B (ISO 9191)

Convective Heat: determination of the heat transmission when exposed to flames. The sample is held above the flame and the rise in temperature on the top side of the sample is measured with a calorimeter. The length of time the sample can remain exposed before its temperature rises by 24°C is determined.

Letter C (ISO 6942)

Exposure to radiant heat: in this test, a fabric sample is exposed to radiant heat (infrared rays). The temperature on the reverse (unexposed) side of the sample is registered using a calorimeter. Subsequently, the length of time the sample can remain exposed before its temperature rises by 24°C is measured. The test procedure is the same as ISO 11611, but the classification is different:

- C1: 7 < 20 seconds, C2: 20 < 50 seconds, C3: 50 < 95 seconds, C4: 95 seconds and longer

Letter D and E (ISO 9193)

D = Aluminium | E = Molten iron

Determining the level of protection against splatters of molten metal. A membrane (with similar properties to human skin) is attached to the reverse of the fabric sample sequentially rising quantities of molten metal (aluminium or iron as applicable) are splashed on the sample. The quantity of molten metal which deforms the membrane is determined.

The classification for molten aluminium is:

- D1: 100 - 200 grams, D2: 200 - 350 grams, D3: 350 grams and more

The classification for molten iron is:

- E1: 60 - 120 grams, E2: 120 - 200 grams, E3: 200 grams and more

Letter F (ISO 12127)

This is a new test to establish a value for contact heat. The classification in this respect:

- F1: 5 < 10 seconds, F2: 10 - 15 seconds, F3: 15 seconds and longer

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+44 (0)1482 679600 info@progarm.com
EN 13034
PROTECTIVE CLOTHING AGAINST LIQUID CHEMICALS

ProGARM® produces garments to protect wearers against liquid chemicals in accordance with this European Standard. These garments are suitable for use in environments where there may be a risk of chemical splashes but where a total chemical barrier is not required. *PB = Partial Body Protection.

The EN 13034 standard specifies the requirements and test methods for Type 6 chemical protection suits for both one-off and multiple use applications. For other related accessories, such as gloves and boots, which are not an integral part of the suit, please refer to the corresponding product standards (see product matrix on page 82). Clothing in this category provides limited protection against small splatters or fumes of liquid chemicals. It is usually made of water-repellent, but not completely waterproof materials. Within the ProGARM® range of products this is often achieved by the use of chemical coatings such as Teflon®, which repel the contaminants and in order to preserve these properties within the fabric of the garment, special washing and drying instructions should be adhered to.

ABOUT THIS EN STANDARD

The fabric is tested in various ways to determine its tensile strength and resistance to chemicals. In these tests, four different solutions of chemicals (Sulphuric Acid H2SO4 30%, Sodium Hydroxide NaOH 30%, 0-xylene undiluted and 1-butanol undiluted) are applied to a fabric sample and the quantities of liquid that drip off and penetrate the fabric are measured and analysed must be within the tolerances set within the standard.

One finished product (of each quality) must also be analysed in a 'mannequin' test. During this spray test, the wearer must perform 7 movements (these are described in the standard) and the permeability of the garment to liquid chemicals is subsequently determined. The classes assigned in the various tests must be clearly listed in the user instructions for the garment.

Where certified to EN 13034, ProGARM® garments are Type 6 garments and must undergo the spray test in order to display the EN pictogram for the standard on the user information and garment Care Label. In some of our garments it should be noted that in some instances the fabric has been tested but the garment and seams have not. In this case, this is clearly marked on the Care Label and the EN pictogram is not shown. Other requirements within the EN 13034 standard include tests for water resistance, tear strength, tensile strength and seam strength. If piece garments are to be worn such as a trouser and jacket combination it is important to ensure that both garments have been certified as a ‘set’ for the specified level of protection.

If chemicals are splashed onto a garment, the wearer should immediately move away from the affected area and carefully remove the garment, ensuring that the chemicals or liquids do not come into contact with any part of the skin. The garment must then be cleaned and assessed for future use or taken out of use.

EN 342
PROTECTION AGAINST COLD

This EN standard specifies the requirements and test methods for garments and clothing combinations designed to protect the wearer in cold environments (characterised by a combination of humidity, wind and air temperature lower than -5 °C). The standard does not contain any specific requirements for head, hand or foot protection.

ABOUT THIS EN STANDARD

This standard’s pictogram is an ice-crystal placed alongside three figures that represent the insulation (Clo), air permeability (X) and, if applicable, the water vapour resistance (Y) values. The precise meaning of these values is explained below.

TCE, X AND Y VALUES

The Clo value indicates a garment’s insulation properties and is a measurement of how long a person can work at a specific temperature when wearing this clothing. It is not a specific class, but can be any value. The table below shows the significance of the Clo value.

<table>
<thead>
<tr>
<th>LIGHT ACTIVITY 115 W/m²</th>
<th>AVERAGE ACTIVITY 170 W/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clo</td>
<td>BH°C</td>
</tr>
<tr>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>2.5</td>
<td>-6</td>
</tr>
<tr>
<td>3.0</td>
<td>-13</td>
</tr>
</tbody>
</table>

The X value indicates a garment’s air permeability. The X value has 3 classes (1 to 3). Class 1 garments have the highest air permeability and Class 3 the least. The air permeability is a wind proofing measurement, Class 1 is therefore the least windproof and Class 3 the most.

The Y value indicates a garment’s water vapour resistance. The Y value also has 3 classes (1 to 3). Class 1 garments have the lowest water vapour resistance and Class 3 garments the highest.

A MORE RECENT VERSION (2004) OF EN 342 IS NOW AVAILABLE

The new version has the following values: Icler / Icle, this is the equivalent of the Clo value and two Y values. The first Y value indicates the air permeability; it is assessed in a different way to the old EN 342, but is still given as Class 1 to 3. The second Y value indicates the garment’s waterproofing. Clothing that complies with EN 342 does not necessarily have to be waterproof. This value can therefore sometimes be omitted. This value has 2 classes - 1 and 2. Class 1 is the least waterproof and Class 2 the most. If a garment is waterproof, its breathability must also be tested.

EN 14404
KNEE PROTECTION

Personal protective equipment. Knee protectors for work in the kneeling position.

ProGARM® produces safety garments that are certified in accordance with the EN 14404 Type 2 standard. This EN Standard relates to trousers and coversalls which offer kneepad pockets to protect the wearer when kneeling.

ABOUT THIS EN STANDARD

EN 14404 only applies in combination with certified kneepads and a garment that has been assessed. All ProGARM® workwear garments with knee pockets comply with EN 14404 and have been assessed accordingly by a notified body.

This measurement prescribed for kneepads depends on the size of the garment in which they are used. The ProGARM® Gel Foam kneepads is our recommended kneepad for use in our garments to ensure the pad fits the pocket and offers protection for wearers from short to long leg lengths.

There are three properties of knee protectors that are tested - these are Penetration Resistance, Force Distribution and Shock Absorption. Two levels of protection can be provided: The ProGARM® Gel Foam Kneepad has been tested according to and meets the requirements for EN14404 Level 1.

LEVEL 1: This level requires kneepads to provide protection on a surface on which the wearer will not generally risk injury from lying objects more than 1 cm high. Penetration resistance of at least 100 N.

LEVEL 2: This level requires kneepads to be able to withstand use under heavy conditions, such as kneeling on stonewas and quanires. Penetration resistance of at least 250 N.

EN 14363
PROTECTION AGAINST RAIN

This EN Standard specifies the requirements and test methods for materials and the seams of protective clothing that has been designed to give protection against precipitation (i.e. rain, sleet, mist and ground moisture. There is also a separate test EN 14360 for assessing the waterproofness of the complete finished garments but this test is not included in EN 343.

ABOUT THIS EN STANDARD

This standard’s icon shows an umbrella placed under two numbers that represent the X and Y values. The X value indicates the waterproofness of the complete finished garments and the Y value indicates the water vapour permeability (the garment’s breathability).

This standard falls within the scope of ‘self-certification’. This means that manufacturers are allowed to certify their own products, which therefore do not need to be assessed by an independent notified body. This is because the only risk to the wearer is that he/she might get wet, which is not a life-threatening hazard. If EN 343 is used in combination with other EN Standards the whole combination of standards is assessed by the notified body.

THE X AND Y VALUES

The X value indicates the waterproofness of the garment. There are 3 Classes with 3 being the highest (i.e. the most waterproof) and 1 the lowest. A specific quantity of pressurised water is applied to the fabric and the respective Class is derived from the amount of pressure the fabric can withstand.

The Y value indicates the breathability of the fabric (all the layers used in the article). There are also 3 classes for breathability with Class 1 being the lowest and Class 3 the highest. Wearing Class 1 garments longer than 5 minutes is not recommended. The length of time the article may be worn (x) is given in the standard in a table.
### ProGARM® PRODUCT MATRIX

#### SINGLE COLOUR COLLECTION

<table>
<thead>
<tr>
<th>Style</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polo Shirt</td>
<td>5200</td>
</tr>
<tr>
<td>Polo Shirt</td>
<td>5280</td>
</tr>
<tr>
<td>Short-Sleeve T-Shirt</td>
<td>5630</td>
</tr>
<tr>
<td>Sweatshirt</td>
<td>5630</td>
</tr>
<tr>
<td>Lined Fleece Jacket</td>
<td>5790</td>
</tr>
<tr>
<td>Jacket</td>
<td>5850</td>
</tr>
<tr>
<td>Lab Coat</td>
<td>5896</td>
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</tbody>
</table>

#### TWO TONE COLLECTION

<table>
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<th>Page</th>
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<td>Coverall</td>
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<td>Trouser</td>
<td>7638</td>
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<td>7636</td>
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<td>5808</td>
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<tr>
<td>Trouser</td>
<td>5814</td>
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<td>Coverall</td>
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<td>6444</td>
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#### HI VIS YELLOW COLLECTION

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<tr>
<td>Trouser</td>
<td>5280</td>
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<tr>
<td>Short-Sleeve T-Shirt</td>
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<tr>
<td>Trouser</td>
<td>5630</td>
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<tr>
<td>Trousers</td>
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<td>Trouser</td>
<td>5850</td>
</tr>
<tr>
<td>Trouser</td>
<td>5896</td>
</tr>
</tbody>
</table>

#### PROTECTIVE CLOTHING AGAINST THE THERMAL HAZARDS OF ELECTRIC ARC

- Open Arc Test Method
  - Cal Rating
    - 1: 11 Cal/cm²
    - 2: 14.4 Cal/cm²
    - 3: 32.3 Cal/cm²
    - 4: 9.5 Cal/cm²

#### PROTECTIVE CLOTHING AGAINST HEAT & FLAME

- Box Test Method, Class 1 or 2
  - A1, B1, C1

#### PROTECTIVE CLOTHING WITH ELECTROSTATIC PROPERTIES

- Class 1, A1

#### HIGH VISIBILITY CLOTHING

- Rail Standard
  - High Visibility Safety

#### PROTECTION AGAINST CHEMICAL LIQUIDS

- Fabric

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**Note:** The images and tables depict various protective clothing options and their specifications. Each style is categorized under different collections, such as single color, two tone, high visibility, and specific protection ratings against thermal hazards, heat & flame, and chemicals.
## ProGARM® PRODUCT MATRIX

### HV YELLOW COLLECTION | HV ORANGE COLLECTION

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Page</th>
<th>Product</th>
<th>Color</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>9910</td>
<td>38</td>
<td>JACKET</td>
<td>HV YELLOW</td>
<td>250GMS + 300GMS</td>
</tr>
<tr>
<td>7480</td>
<td>39</td>
<td>TROUSER</td>
<td>HV YELLOW</td>
<td>250GMS + 300GMS</td>
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<tr>
<td>7418</td>
<td>40</td>
<td>POLO SHIRT</td>
<td>HV ORANGE</td>
<td>240GMS</td>
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### OUTER GARMENT COLLECTION

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### ACCESSORIES & OTHER GARMENTS

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<th>Page</th>
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<tr>
<td>8400</td>
<td>60</td>
</tr>
</tbody>
</table>

### Protective Clothing Against the Thermal Hazards of Electric Arc

- **Open Arc Test Method**
  - Class 2, A1, B1, C1, D2, E2, F1
  - Class 2, A1, B1, C1, D2, E2, F1
  - Class 2, A1, B1, C1, D2, E2, F1

### Protective Clothing Against Heat & Flame

- **Box Test Method, Class 1 or 2**
  - A1, B1, C1, D1, E1, F1
  - A1, B1, C1, D1, E1, F1
  - A1, B1, C1, D1, E1, F1

### Protective Clothing with Electrostatic Properties

- **Class 1, A1**
- **Class 2, A1**
- **Class 3, A1**

### Protective Clothing for Welding and Allied Processes

- **Class 1, A1**
- **Class 2, A1**
- **Class 3, A1**

### High Visibility Clothing

- **Class 3, A1**
- **Class 2, A1**
- **Class 1, A1**

### Protection Against Rain

- **Partial Body**
- **Partial Body**
- **Partial Body**

### Protection Against Chemical Liquids

- **Partial Body**
- **Partial Body**
- **Partial Body**

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**Contact Information**

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**BESPOKE PRODUCTS**

**ProGARM® 9911 SOFTSHELL JACKET**

Sizes: 5-3XL  
Colour: Navy  
Product care:  
FABRIC: VXS+ Inherent Fabric with waterproof membrane - 405gms  
EN STANDARDS:  
FABRIC SPECIFICATION: VXS+ Inherent Fabric

**ProGARM® 7630 TROUSER**

Sizes: 38-52” Regular leg (32”/81cm)  
32-60” Tall leg (34”/86cm)  
32-42” Short leg (30”/76cm)  
Colour: Navy/Yellow  
Product care:  
FABRIC: Woven Inherent Fabric

**ProGARM® 5895 LAB COAT**

Sizes: S-4XL  
Colour: Navy  
Product care:  
FABRIC: VXS+ Inherent Fabric  
EN STANDARDS:  
FABRIC SPECIFICATION: VXS+ 250W 250g/m²

**ProGARM® 6448 COVERALL**

Sizes: S-4XL Regular leg (31’/80cm)  
M-2XL Tall leg (33’/85cm)  
32-42” Short leg (30’/76cm)  
Colour: HV Yellow/Red

**ProGARM® 6450 COVERALL**

Sizes: 38-60” Regular leg (32’/81cm)  
40-52” Tall leg (34’/86cm)  
Colour: Navy/Yellow  
Product care:  
FABRIC: VXS+ Inherent Fabric

**BRANDING AND GARMENT ALTERATIONS**

**BRANDING**

ProGARM® recommends the use of FR Heat Transfers or FR Embroidery Threads for branding on any of the FR Arc garments in the collection to ensure compliance with the original CE certification. Considerations should also be taken when adding branding to EN20471 or EN471 hi visibility garments that large logos do not reduce the surface area of the background material.

**FR HEAT TRANSFERS**

These heat applied transfers contain an FR component and are easy to apply using an industrial heat press and can be printed in any Pantone® colour for exact replication of your company logo or brand. The transfers are pre-ordered in bulk quantities and can be quickly applied to your garments before dispatch.

**FR EMBROIDERY THREADS**

Standard embroidery threads are usually Rayon or polyester blends which burn, melt and drip with exposure to a flame. Using this type of thread on embroidery designs (in particular heavy stitched designs) poses a serious potential hazard on FR Arc garments and is not recommended. A recent example of a large arm badge on a garment using non FR threads resulted in burning and injury to the wearer – further information can be found on our website regarding this incident. We recommend the use of meta-aramid Flame Resistant threads when applying emblems to any of the ProGARM® garments.

**GARMENT ALTERATIONS**

The ProGARM® range of products is based on a stock service for fast delivery to our wearers. Some alterations can be undertaken on these stock garments providing the conformity of the garment is not compromised. For example, trousers or some coveralls can be re-hemmed to shorter leg lengths if required. For special sizes, or more detailed alterations please contact the sales office to discuss what we can offer and the typical delivery times and minimum order quantities we request.

**ProGARM® ARC TRANSFER SYMBOL**

Part of our SafetyICON™ system we can offer a bespoke transfer on the garment to identify the calorific rating of the garment, for further information please contact sales@progarm.com
Whilst every effort has been made to ensure the accuracy of all product descriptions, sizes and specifications, continual development of our product range means that certain details may change without notice. Though we make every attempt to ensure the colours of our products are reproduced as accurately as possible, they are provided for illustrative purposes and may differ from the actual product you receive. We reserve the right to improve products from our collection without notice.