WORKWEAR PRODUCT GUIDE

EDITION 1.3

BISON BY PIP

BISON BY NAME KIWI BY HEART

Bison Workwear and Footwear is designed and developed in New Zealand. Expert teams work with the world's best materials, fabrics and techniques while focusing on safety, innovation, endurance and wearability. Combine this with our knowledge in safety and exceptional service, we continue to prove Bison's reputation is well deserved.

BISON

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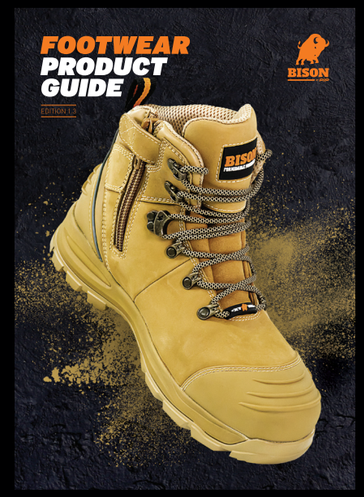
This catalogue is also printed using environmentally friendly inks and an eco friendly laminate.

2-IN-1 CATALOGUE



FLIP OVER CATALOGUE FOR BISON FOOTWEAR

BISON ARCGUARD BY BISON

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PIP GLOBAL SAFETY

BISON STORY

Bison (formerly Argyle Performance Workwear) has over 45 years industry experience and continues to grow with our strong Safety Workwear and Footwear Range.

Within the Bison family we have our highly acclaimed Arcguard brand, synonymous for High Risk Workwear. Our other popular brands, TWZ and Turu, have become part of the Bison brand - same great product, now Bison by name.

Our Workwear and Footwear is especially designed in New Zealand for the New Zealand conditions. We work with the worlds best materials, fabrics and latest technology to ensure you have the most comfortable high performing workwear for your day-to-day requirements.

Bison is now part of the PIP® global family, making us part of an exciting one-stop shop for all of your safety needs.

BISON BRANDS

BISON
FORMIDABLE PROTECTION

Apparel and Footwear come under the main Bison brand.

BISON WORKZONE

Bison Workzone consists of industrial Overalls and Food Industry garments.

BISON EXTREME

Bison Extreme consists of our premium and most innovative and advanced Rainwear.

WATERPROOF 12HR GUARANTEE

BISON STAMINA

Bison Stamina consists of our modular rainwear options and includes the Bison Stamina FR (Index 1) range with anti-static carbon grid.

WATERPROOF 6HR GUARANTEE

ARCGUARD BY BISON

The Arcguard High Risk range includes ATPV rated and Antistatic Apparel, Overalls and Rainwear.

PIP GLOBAL SAFETY

GLOBAL PROVIDER OF INNOVATIVE SAFETY PRODUCTS

PIP Global Safety is the world's fastest growing global supplier of personal protective equipment and industrial safety products. With over 40 years of safety expertise, industry-leading brands, quality products and best-in-class customer service, we're committed to being your trusted business partner.

Each day we seek to develop, train and provide our customers with innovative safety products that help keep workers safer, more comfortable and more productive. We work with our distributor partners to deliver best-in-class customer experiences by providing a comprehensive product offering, world-class sales tools and efficient processes.

Our strategically positioned manufacturing facilities around the world enable us to provide safety solutions that are tailored to customer needs. These factories work with our team of product managers, specialists and field quality control technicians to ensure the highest level of product performance and secure proprietary technologies that support us being first to market.

Our slogan 'Bringing the Best of the World to you' is not just about products, it is also about knowledge,our long-standing history of developing innovative solutions that protect end-users and our commitment to serving our customers better than anyone else in the market. We are here to support you by solving problems in a cost-effective way, and to keep workers safe and performing at their best.

PIP Global Safety recently acquired Paramount Safety Products (including BISON) and Bisley Workwear to secure best-in-class representation in the APAC region.

PIPGLOBAL.COM

EXTENSIVE PRODUCT PORTFOLIO

HAND PROTECTION · PROTECTIVE CLOTHING & WORK WEAR · ARM PROTECTION · HEAD PROTECTION · CHEMICAL & LIQUID PROTECTION · RESPIRATORY PROTECTION

HEARING PROTECTION · EYE & FACE PROTECTION · RUBBER FOOTWEAR & WORK BOOTS · ERGONOMIC PRODUCTS · HEAT PROTECTION & SUNSCREEN · COLD PROTECTION

HEIGHT SAFETY · LIFTING RIGGING · SITE SAFETY & SPILL CONTROL · SAFETY KNIVES · HYDRATION & COOLING · FIRST AID & INJURY RESPONSE

OUR BRANDS (APAC)

Bisley WORKWEAR · PRO PRO CHOICE SAFETY GEAR · THORZT HYDRATING HARD WORK

G-Tek · BISON · PRATT SAFETY SYSTEMS · PIP

UNO · MEDIQ THE SMART CHOICE IN FIRST AID · Grippaz Patented Non-Slip Gloves · PUMA SAFETY

LONG HISTORY OF 35+
YEARS IN PERSONAL PROTECTION

10 MANUFACTURING
LOCATIONS WORLDWIDE

WORKFORCE OF OVER 1700+
DEDICATED AND INSPIRING EMPLOYEES

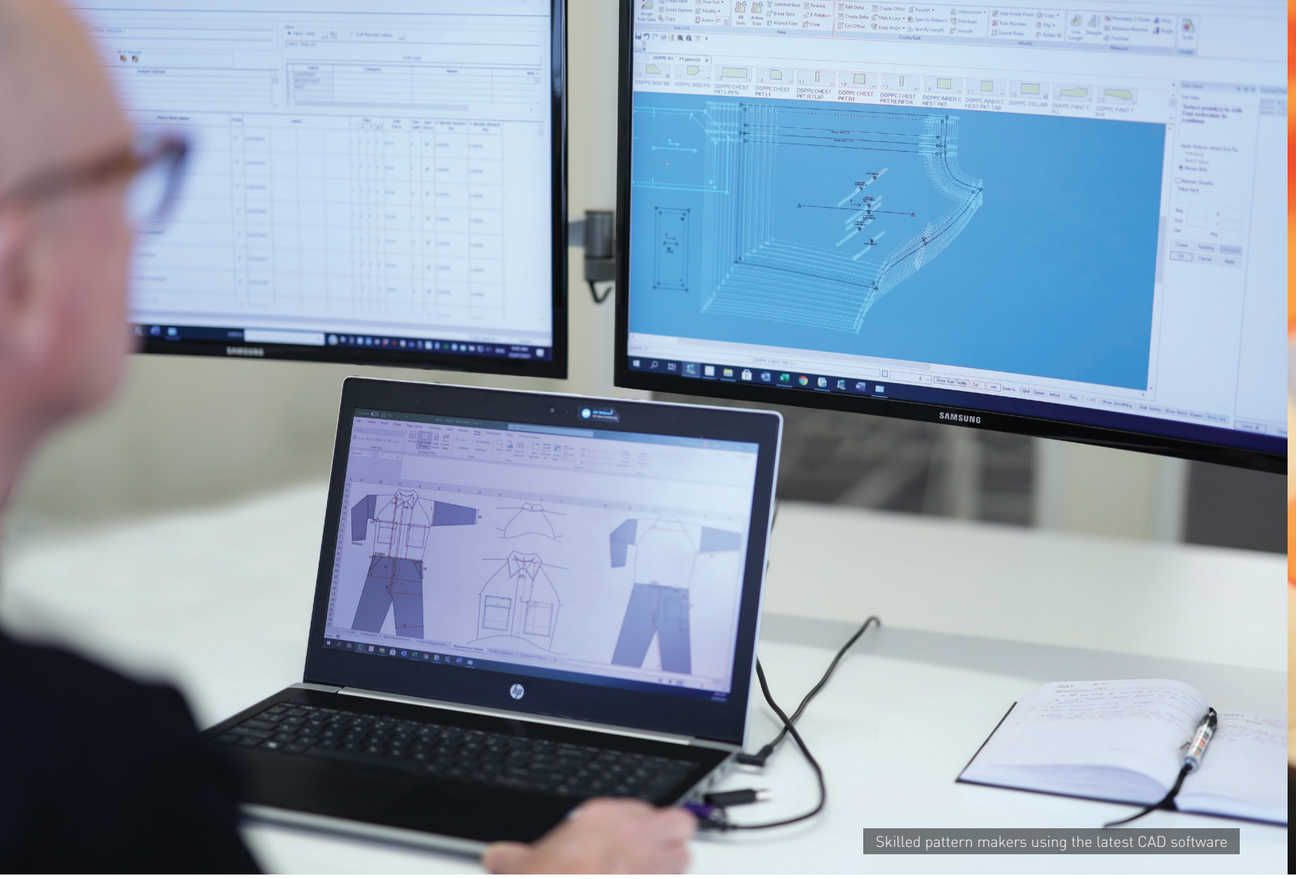
2 MILLION
SQUARE FEET OF DISTRIBUTION CENTERS

WIDE SELECTION OF 20,000+
PRODUCTS AND STYLES AVAILABLE

SUPPORTED BY 12K
HAPPY CUSTOMERS

20+ GLOBAL
LOCATIONS

$1 BILLION
IN ANNUAL GROSS REVENUE



Skilled pattern makers using the latest CAD software

Weighing fabric to ensure our products are always to spec

Creating prototypes on site

BISON DESIGNED AND REFINED

FROM THE FIRST DRAFT TO FINAL PRODUCT AND EVERYTHING IN BETWEEN.

Manufacturing industrial workwear of the highest standard requires an extensive knowledge base. Ours has grown through time tested relationships and alignments with the most diverse range of industries.

Over time it became obvious that in order to provide consistent quality to a demanding workforce, we'd need to engage Kiwi ingenuity rather than just relying on foreign suppliers. This meant taking things back to the drawing board and developing an in-house New Zealand design and development team.

"WE DON'T JUST COMPLY, WE CERTIFY"

Our Bison research, design, refine process is now embedded in the business. It has become instrumental in the creation of innovative workwear across our entire range. As our name suggests, we're about 'Formidable Protection' which means understanding the unique demands of our diverse customer base to enhance their own performance. The 'design and refine' process never ceases, allowing us to continually deliver true improvement and innovation.

THE BISON FIT

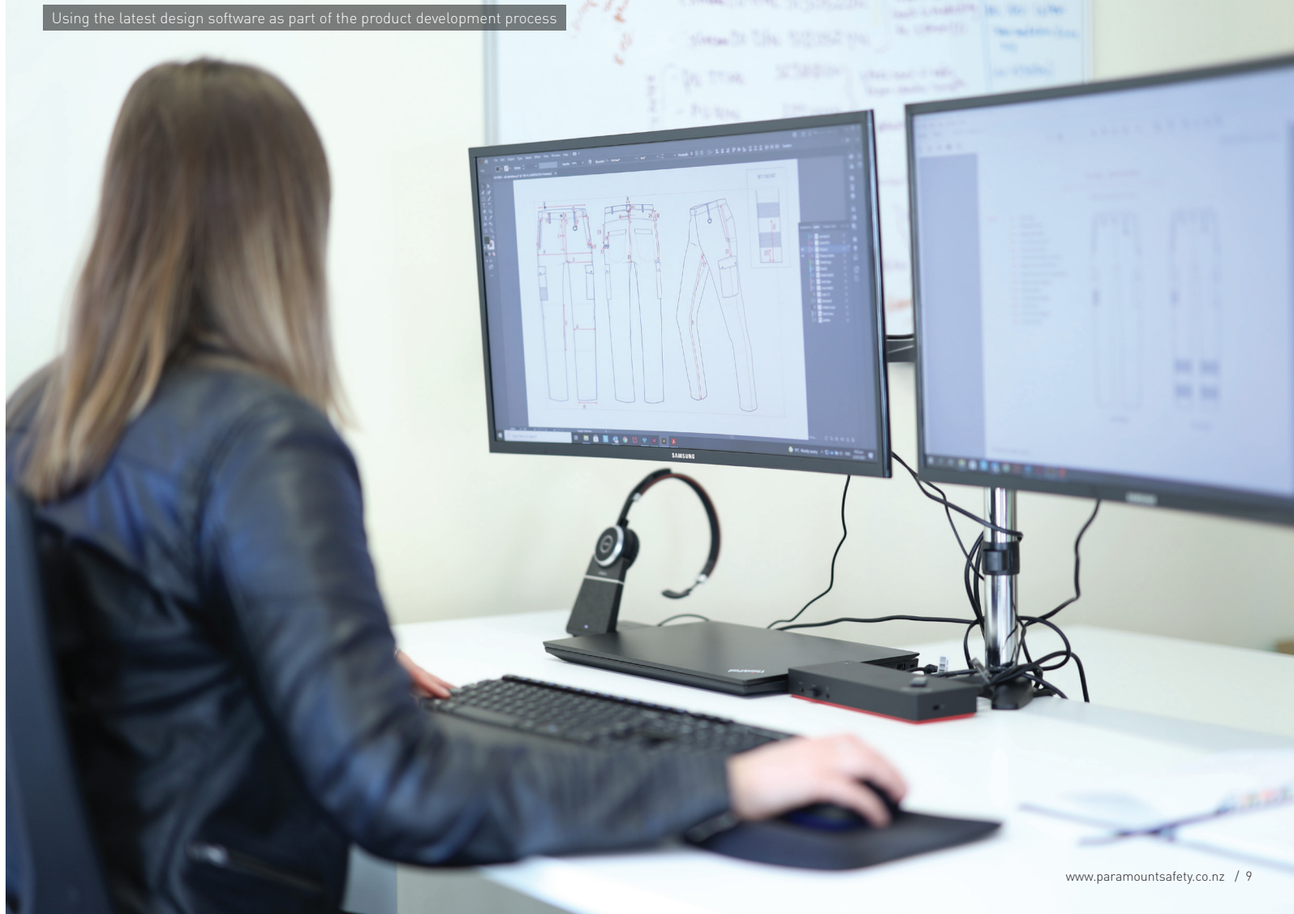
Each of our new products are fitted to fit models. Our fit models are people who actually work in the industry the garment is designed for. By doing this we get real time feedback about comfort and movement from people who know how the garment needs to behave. The industries usual approach is to use one model that measures true to a standard size, usually a size large. To get a better sample of our customers we take it one step further and use two fit models, a size large and a size 4XL. By doing this we are able to develop a realistic size grade. Our products are fitted by Kiwis for Kiwis.

TRIED AND TESTED BY NEW ZEALANDERS

Each of our new garments are put through a rigorous trial stage during the development process. The product is trialled on the ground by actual members of industry. We like to ask managers to 'give it to your toughest staff member'. We need the cold hard truth when it comes to wear testing, we'll refine as many times as we need to get it just right.

DESIGNING FOR SAFETY

When it comes to Safety and Standards we don't just comply, we certify! Every safety design and batch of fabric we use, from Hi-Vis to Arcguard, is certified at reputable test houses around the world. We will not let production commence unless we have positive test results and pass certification. Certification is available on request.



Using the latest design software as part of the product development process

Photo credit: Naja Bertolt Jensen

BISON SUSTAINABILITY JOURNEY

On our Sustainability Journey we have already made some great steps in becoming a more sustainable and eco friendly company by 2025. Some of our milestones on our journey so far have been;

- We launched our first ever Recycled Polyester T-Shirts with more recycled products in the works.
- We are working alongside The Packaging Forum's Soft Plastic Recycling Scheme.
- We are an ISO certified organisation and are now ISO 9001, ISO 14001 and ISO 45001 approved.

In our search for better solutions our purchasing decisions will follow a more sustainability mindset. We will be looking into sustainable straps, packing tape, boxes and packing labels.

Any printing collateral will have sustainable sourced paper and environmental inks. We are also using more digital technology and providing electronic platforms like our Distributors Resources Tab on our website to reduce the need for paper and hard copy documents.

RECYCLED POLYESTER T-SHIRTS

We are excited to introduce our new range of Recycled Polyester T-Shirts! These are created with plastic bottles and other plastics which have been granulated, then reduced down to minute particles or fragments and are then turned into a fibre and yarn to make our T-Shirts.

SOFT PLASTIC RECYCLING SCHEME

Bison as part of Paramount Safety Products are members of The Packaging Forum and The Soft Plastic Recycling Scheme.
The Soft Plastics Scheme has made it possible, and easy, to recycle our soft plastic packaging. The polybags we do use are a soft plastic made with at least 20-30% recycled LDPE.

Once soft plastics are collected, the materials are then recycled through processes set up by members of the Soft Plastic Recycling Scheme. Companies such as Future Post and Second Life Plastics turn plastic into useful products, like fence posts, garden frames and buckets.

Bison have already made great steps in reducing packaging materials and implementing new ECO FUTURE procedures. We have reduced a number of our swing tags on our garments and footwear as well as eliminating polybags from our MOHAWK and INCA Gumboots.

We can't get rid of packaging right away, but we can make it as easy as possible for you to recycle. For more information on this scheme you can visit www.recycling.kiwi.nz

ISO CERTIFIED

ISO (International Organization for Standardization) are an independent, non-governmental international organization who brings together experts to share knowledge and develop international standards that support innovation and provide solutions to global challenges.

By obtaining ISO certification in Occupational Health and Safety, Quality Management and Environmental Management we have the right structure and systems in place in order to put our customers first, continue to develop new ways to reduce our environmental impact and ensure our people are safe at work.

Our commitment to continuous improvement means we are constantly refining our processes. We are committed to developing industry leading workwear and footwear, made to the highest possible standards, using only the best of materials.

ISO 45001 – Occupational Health and Safety

ISO 45001 is the world's international standard for Occupational Health and Safety, issued to protect employees and visitors from work-related accidents and diseases. ISO 45001 certification was developed to mitigate any factors that can cause employees and businesses irreparable harm or that pose a danger to workers' physical or mental well-being.

ISO 9001 - Quality Management Systems

ISO 9001 sets out the steps necessary to adopt a quality management system. It is designed to help organisations ensure they meet the needs and expectations of both customers and other interested parties, based on internationally recognised quality management principles.

At the heart of the standard is a quality policy and set of systems and principles that tie together business objectives, customer needs and your marketing plan. When this approach to quality is embedded across the business every employee understands how their actions create a better customer experience and processes are put in place to continually review and improve that customer experience.

ISO 14001 - Environmental Management

Part of the ISO 14001 family of international standards covering environmental impact and the reduction of greenhouse gas emissions, ISO 14001 is the standard that covers the design and implementation of an Environment Management System (EMS). This is a framework designed to measure and improve the way natural resources are used and disposed of by an organisation.

ISO 14001 certification shows an organisational commitment to the environment and the more effective use of the world's resources. ISO 14001 will reduce waste, costs and risk.

SUPPORTING FOR ALL THE BROTHERS

For All The Brothers (FATB) is a Men's Mental Health support group that aims to change the views on mental health in the male community. FATB's founder Zane Munro started FATB 4 years ago as an Instagram page to create a space/platform for men to connect and share experiences away from stigma, stressors, and judgement.

Zane has faced his own battles with anxiety and depression, like many men. Instead of talking about his struggles he used unhealthy coping mechanisms. Eventually realising that all this was doing was destroying himself and those around him. Feeling alone he just wished he had someone, a brother, to talk to and share with all that he was feeling without being judged or laughed at. Thus, For All The Brothers was born.

Due to genuine, open, vulnerable content and conversation based on real experiences as well as spreading positivity, this had led to a real connection with people and in a short space of time has grown to a following of over 35,000. This following is not just in New Zealand, there are men from countries all around the world connecting daily, weekly and monthly to help each other.

FATB initially started as just an online platform for people to support each other and share information, coping mechanisms and personal experiences. Growing in size we decided to start facilitating men's walks where men can meet up with other men who are going through or have been through mental health struggles and talk about their experiences in a judgement free environment. These also grew in size and interest and are now being held in multiple locations around New Zealand.

Common stressors for men that can affect mental health are work, family, finances, health and injuries, relationship breakups, child custody, alcohol and drugs, and death of loved ones. While everyone can be affected by these things, some people deal with them differently and are affected in different ways. While we focus predominantly on men's mental health we also have a large following of women in our community who help out immensely and support the want to change the view and stigma around men's mental health.

Throughout the journey that FATB has been on, we began noticing we had a huge following of men working within the trades and construction industry. The stigma around men's mental health in the trades and construction industry in strong due to generational influence that men in the industry are strong and hard (mentally) we don't struggle, we don't feel. On average we lose 1 male a week to suicide within the trades and construction industry.

Because of this Zane decided to start 'For All The Brothers Tradie Tuesday' putting a focus on the pressures and struggles experienced by men in the industry. Tradie Tuesday is a day of the week that we post trade and construction focused posts and share stories from men working within this industry that are and have had mental health struggles in hope to raise awareness and normalise mental health issues within the industry.

> **"WE LOSE 1 BROTHER A WEEK TO SUICIDE HERE IN NEW ZEALAND"**

FATB quickly built strong relationships with company owners, team leaders and suppliers within the industry. We have provided advice to people on how to manage and normalise conversations with their teams and build more open and honest relationships within their work forces. Along with this we began doing giveaways sponsored by our many supporters of Tradie Tuesday, providing a fun and inclusive way to spread awareness while treating our winners to awesome gifts and packages. The only way to win a giveaway is to get involved. We have a plan for the future of developing a 'Tool Box Chat' structure for employers to use and in the future to come and do presentations on mental health awareness and how to create coping mechanisms and health habits at Tool Box meetings.

We lose 1 brother a week to suicide here in New Zealand from the trades and construction sector. This statistic doesn't even scrape the surface of how many others are actually struggling silently each and every day.

We wanted to be that change, to be that difference and to create a community of brothers out there showing up be it for themselves, their work mates or others within the community who are finding life tough.

We are looking forward to the future of For All The Brothers and growing our community with every intention of reaching and connecting with as many men as possible. With acceptance, understanding and support in a judgement free environment we can change the stigma around mental health and potentially save lives.

Zane Munro
For All The Brothers - Be The Change.

@forallthebrothers

Bison and @gystforkickz created this one of a kind Dune Safety Boot for FATB to show our support for such a great community. Thanks to people like Zane there is a platform for tradies to connect, share, talk and support one another.

SPONSORS OF NAWIC

National Association of Women in Construction (NAWIC) is a voluntary, non-profit association of women who work either in the construction industry or for business organisations who provide services to the construction industry.

NAWIC

ABOUT NAWIC

The number of women in the construction industry has grown exponentially in recent years and women are hard at work in just about every construction job. This growth has prompted the establishment and success of NAWIC in New Zealand.

NAWIC was founded in Texas in 1952 by a group of 16 women. Since then it has grown to an international organisation. Today it is going strong in the USA, UK, Ireland, Canada, Australia, South Africa, New Zealand and most recently in Qatar.

NAWIC New Zealand has been active in Wellington since 1996, and has Chapters in Auckland, Waikato, Bay of Plenty, Wellington and Canterbury and two satellite chapters, one in Queenstown Lakes and the other in Otago. They are also establishing additional satellite chapters as interest grows outside these regions.

> **"NAWIC - THE LEADING VOICE FOR WOMEN IN THE CONSTRUCTION INDUSTRY!"**

NAWIC's membership base is diverse and includes the following professions and more; quantity surveyors, project managers, suppliers, planners, designers, architects, engineers, tradespeople, students, apprentices, health and safety managers and lawyers.

NAWIC encourages women to pursue, establish and sustain successful careers in the construction industry. Their vision is to be the leading voice for women in this sector.

They hold regular events, with a focus on both technical and professional development, to inform and up-skill women in construction and to promote networking and information sharing for the betterment of the construction industry as a whole. These events are held in person and online with a variety of topics.

HOW BISON IS SUPPORTING NAWIC

Bison are proud to be a Blue Ribbon Sponsor of NAWIC!
NAWIC is a not-for-profit organisation who rely on industry sponsorships to help them continue to champion and empower women in the construction and related industries.

Bison are Gift Sponsors for the NAWIC Excellence Awards!
These awards are held annually to celebrate and honour the achievements of women working in construction and affiliated industries, as well as recognising those organisations active in redressing the gender imbalance in the industry. As a gift sponsor Bison are gifting winners with a range of our Women's Workwear.

As we expand the Bison Women's Workwear range it is only fitting that we show our support. With NAWIC's vision to be the leading voice for women in the construction industry - Bison are working alongside them to create awareness of Bison Womens Workwear with the vision to be the leading voice for women's workwear!

When our product development team created our Bison Women's Workwear range we had resounding feedback that women wanted to dress the same as their male colleagues, but not look like they were wearing men's clothes. In most cases for women who were required to wear a uniform they were only offered men's workwear.

Bison Workwear stock the same products but designed to fit women and designed to fit men. For team uniformity this means the whole team can wear the same kit but with their own fit requirements!

Bison Women's Workwear - designed by NZ women for NZ women and proud sponsors of NAWIC!

Photo: NAWIC's Wellington Chapter Chair, Kat Ricketts in Bison Workwear.

LET'S GET SOCIAL

JUST SCAN THIS QR CODE WITH YOUR PHONE CAMERA TO VISIT OUR SOCIAL MEDIA PAGES

bison_nz
Bison Workwear and Footwear
Bison Workwear and Footwear

STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

The Waka Kotahi (NZTA) CoPTTM specifies two main colours with regards to use on New Zealand roads;

- Yellow: Garments for site traffic management supervisors - STMS; and
- Orange: Garments for all wearers other than supervisors.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (eg 100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabrics technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment.
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

STMS GARMENTS

- The STMS sleeveless vest enables the person responsible at a worksite to be readily identified.
- The background material colour must be fluorescent yellow.
- STMS garments are limited to the STMS logo located on the upper front left side of the garment and as specified on the back of the garment and the technical recognition I.D. as appropriate. Other logos or labels may not be added.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS N

Class N are garments designed for night time use only. Class N has no fluorescent fabric but does have retro-reflective tape. Class N provides the wearer with high visibility at night when viewed under retro-reflected light such as vehicle headlights.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

CLASS NF (NON-FLUORESCENT BACKGROUND MATERIAL)

Refers to Non-fluorescent background material. Class NF materials do not have the fluorescent properties of class F materials and will provide reduced luminance for the wearer. Where for safety reasons a garment must be made from natural fibre which is unable to retain fluorescent colour class NF fabric can be used. These are often, but not limited to, cotton and FR blends.

AS/NZS 4399:2017 - SUN PROTECTIVE CLOTHING

Products have been tested to the Australian/New Zealand standard for sun protective clothing AS/NZS 4399:2017 (Ultraviolet Protection Factor).

EN 343 PROTECTIVE CLOTHING - PROTECTION AGAINST RAIN

EN 343 is a European Standard for protective clothing that outlines a minimum level of protection against wet weather, and is tested for its ability to withstand heavy water pressure and for its breathability.

HIGH RISK STANDARDS EXPLAINED

NFPA 70E

Standard for Electrical Safety in the Workplace. NFPA is an American National Fire Protection Association standard, often adopted by New Zealand, that covers safe work practices to protect personnel by reducing exposure to major electrical hazards. NFPA 70E helps companies and employees avoid workplace injuries and fatalities due to shock, electrocution, arc flash, and arc blast.

ASTM F1959/F1959M AND IEC 61482-1-1

Standard Test Method for Determining the Arc Rating of Materials for Clothing. This standard test method is used to measure the arc rating of materials intended for use as flame resistant clothing for workers exposed to electric arcs.

ISO 14116

Protective clothing - Protection against flame - Limited flame spread materials, material assemblies and clothing. Garments certified to this standard protect workers from occasional and brief contact with small igniting flames, in circumstances where there is no heat hazard from flame or other source. The standard specifies limited flame spread properties in order to reduce the possibility of the clothing burning and thereby itself becoming the hazard.

ISO 11611:2015

Protective clothing for use in welding and allied processes. This standard specifies minimum basic safety requirements and test methods for protective clothing which is intended to protect the wearer against spatter (small splashes of molten metal), short contact time with flame, radiant heat from an electric arc used for welding and allied processes. It also minimizes the possibility of electrical shock by short-term, accidental contact with live electrical conductors in normal conditions of welding.

ISO 11612:2015

Protective clothing - Clothing to protect against heat and flame - Minimum performance requirements. These performance requirements are applicable to protective clothing where there is a need for clothing with limited flame spread properties and where the user can be exposed to radiant/ convective/contact heat or to molten metal splashes.

EN 1149:2008

Protective clothing. Electrostatic properties. Material performance and design requirements. The EN 1149 standard specifies a test method for materials to be used in the production of protective clothing with electrostatic dissipation for preventing incendiary discharge.

EN 1149-3:2008
Protective clothing. Electrostatic properties. Test methods for measurement of charge decay. The fabric releases its electrostatic charge to the air therefore won't conduct it to the user of the clothing. The standard contains a test method in which the amount of time it takes to dissipate electrostatic charge from the surface of the clothing material.

EN 1149-5:2008
Electrostatic properties. Performance requirements and material design. This is the European Standard for garments that protect against electrostatic discharge in areas where there is a risk of explosion and where there is a risk that the garments could create sparks (source of ignition), which in turn could ignite explosive materials.

MAKE SURE YOUR WORKWEAR IS CERTIFIED

Protective clothing must be suitable for the nature of the work and any risks associated with that work. Garments may no longer comply to certification or be effective if;

- Material shows visible fading or soiling.
- Retro-reflective material shows cracking.
- Branding/logos do not comply to the AS/NZS 4602.1:2011 standards.
- Protective clothing must fit the worker properly for both comfort and safety.

BISON ICONS AND STANDARDS GUIDE

WORKWEAR ICONS AND STANDARDS

Garment tested & certified to Temporary Traffic Management Control - Wet (TTMC-W17) code of practice as per CoPTTM section B3.

Design tested & certified to: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. Suitable for Day/Night time use.

Design tested & certified to: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. Suitable for Day use only.

Hi-Vis fabric tested & certified to: AS/NZS 1906.4.2010.

Fabric certified to AS/NZS 4399 UPF 50+.

Fabric certified to AS/NZS 4399 UPF 30.

Rapid Reflective Recognition 'X' tape pattern on the back of garments gives greater front and back differentiation.

Waterproof material exceeds: EN 343 Protective clothing - Protection against rain.

Stay dry for 12hrs in our Bison Extreme Rainwear (tested to 25,000mm and 30,000+mm Water-Resistant Rating).

Stay dry for 6hrs in our Bison Stamina Rainwear (tested to 20,000mm Water-Resistant Rating). Bison Stamina FR has a 16,000mm waterproof rating.

Resistant to light rain.

Fabric and/or garment are lighter weight than average. This allows for better comfort and temperature control.

In-built stretch for increased movement, flex and comfort.

Meets IS3/IAS3 NZ Food Industry Guidelines.

HIGH RISK ICONS AND STANDARDS

Fabric tested & certified to: ISO 14116. To protect workers against occasional and brief contact with small igniting flames. Limited flame spread materials, material assembles and clothing.

Electrical Arc Flash protection in accordance with NFPA 70E PPE Categories 1, 2, and 3. Fabric tested according to the standard ASTM F1959/F1959M, Determination of the Arc rating (ATPV or EBT50) of flame resistant material clothing.

8.6cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

8.8cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

10cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

11cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

12cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

13cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

16cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

18.4cal/cm2 ATPV / Arc Rating. PPE Category 2 in accordance with NFPA 70E. ASTM F1959/F1959M.

29cal/cm2 ATPV / Arc Rating. PPE Category 3 in accordance with NFPA 70E. ASTM F1959/F1959M.

Fabric tested & certified to: EN ISO 11611. Protective clothing for welding and allied processes.

Fabric tested & certified to: EN ISO 11612 Protective clothing - Clothing to protect against heat and flame.

Garment exceeds: EN 1149:2018 Antistatic properties for protective clothing.

BISON INNOVATION & TECHNOLOGY

ULTRA-FLECT™

Ultra-Flect™ is Bison's toughest Retro-Reflective tape and has been designed to offer the highest visibility in every situation! Our Ultra-Flect™ tape comes in Segmented, Heat Applied and Fire Retardant (FR), and all exceed the AS/NZS 1906.4:2010 Standard for High visibility materials for safety garments.

- Ultra-Flect™ Segmented tape allows for greater airflow, flexibility, and freedom of movement. Our segmented tape is heat applied so it doesn't leave stitch holes.
- Ultra-Flect™ Heat Applied tape is applied to the garment with no stitching. This saves thousands of stitch holes and seam seal tapes in products like our rainwear.
- Ultra-Flect™ Fire Retardant (FR) tape used on Arc Rated and Flame Retardant garments is fire retardant and exceeds AS/NZS 4967:2009, AMDT No.1:2010 in addition to the above Ultra-Flect™ standard.

RIPSTOP

Ripstop fabric, is a woven, lightweight material that has a superior resistance to tearing and ripping. Ripstop is made by weaving threads throughout a base material in interlocking patterns, the crosshatched threads giving the material an exceptional tear-resistance.

ENDURA™

Endura™ is an extremely tough and durable textile, giving it functionality yet longevity. Endura™ has outstanding strength to weight ratio and exceptional resistance to abrasion, tear, scuffs and punctures.

ENDURALITE™

EnduraLite™ is an extremely tough, durable and lightweight textile, giving it functionality yet longevity. Exceeds AS 2001.2.25 Abrasion test. Exceeds AS 2001.1.2.3, Tensile Strength test.

TOUGH CRUTCH™

Research has shown that the key failure point on lightweight garments is in the crotch area. With this in mind, we have reinforced our lightweight trousers with the Tough Crutch™. The reinforcing panel, coupled with the strength of our special high tensile thread, gives you the confidence and comfort you would expect from our workwear.

TOUGH SCUFF™

We've used our EnduraLite™ fabric insert at the bottom of the trouser to ensure a long life and no fraying edges.

STRATATEK™

Bison Stratatek™ fabric is trialled in the harshest New Zealand weather conditions. It's subjected to extreme testing which exceeds the most stringent test standards. Bison Stratatek™ is made using a 3-layer construction. The outer layer is an extremely tough polyester oxford weave fabric. The second layer is a breathable, waterproof, microporous membrane. The third layer is a flexible tricot knit-back, which encases the membrane to improve comfort and prevent damage.

- Bison Extreme 300D fabric has a 25,000mm waterproof rating with a breathability rating of 4,000g/m²/24hr and comes with our 12hr Waterproof Guarantee.
- Bison Extreme 450D fabric is our toughest rainwear yet with the best tear strength, phenomenal abrasion resistance, and high flexibility. It also comes with a 30,000+mm waterproof rating with a breathability rating of 4,000g/m²/24hr and comes with our 12hr Waterproof Guarantee.

INHERATEX™

Arcguard Inheratex™ is a blended Inherent FR fabric which offers uncompromising Flame Resistance, Arc Protection and Antistatic protection. Inheratex has inherent flame retardant properties which will not deteriorate or diminish; they are literally a structural part of the fibre. Inheratex fabric is soft, strong, and resilient, made from fibres that can be easily dyed, with good shape retention and quick drying. Inheratex is non-allergenic and has resistance to chemicals and solvents.

Arcguard Inheratex™ fabrics and products come in different weights, construction, and cal rating, but all have the same type of protection at its core – a lifetime of FR protection.

INHERALITE™

The new Arcguard InheraLite™ range combines the best of the Arcguard Inherent FR fabric that you already know and love, with high performing LENZING™ FR fabric to create a brand-new hybrid solution in High-Risk protection. The blended benefits of Arcguard InheraLite™ include:

- Arc rating: 8.8 cal/cm² ATPV HRC2/PPE2
- 185gsm LENZING™ FR Ripstop and Arcguard™ Modacrylic blended fibre
- Inherent Fire Retardant, Antistatic, and Arc protection guaranteed for the entire life of the garment
- New lightweight and breathable design helps reduce the risk of heat stress and physiological strain on workers
- LENZING™ FR has natural softness and comfort, enhanced breathability, and good moisture management
- Ultra-Flect™ Fire Retardant (FR) reflective tape as standard
- ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60, IEC 61482-1-1: 2019, EN 1149-5:2018.

APPAREL

**T-SHIRTS / SINGLETS / POLOS / SHIRTS
VESTS / HOODIES / FLEECE /
SOFTSHELL / TROUSERS / SHORTS**

As a leading apparel and workwear manufacturer, we have a range of high quality innovative workwear developed with safety standards and comfort in mind. Design features set these garments apart, in style and innovation. This includes a superior level of performance and comfort, ensuring the team you are fitting out will stand out.

BISON

APPAREL

APPAREL QUICK REFERENCE

T-SHIRTS / SINGLETS
PG 29-30

29005BK

29005GY

29105Y

26105ON

26105YN

POLOS
PG 31-39

2310510

231052Y

231051Y

23105ON

23105YN

2310110

231011Y

231012ON

231012YN

W23101ON

W23101YN

23205SPY

23205YN

232050N

232012O

232012Y

232011ON

232011YN

W232010N

W23201YN

233051O

233020

233010X

243052O

243020

243020X

243010

W243010X

SHIRTS
PG 40-41

22001BK

220012BKGY

220012BKR

210012BK

210011BKGY

210011BKR

211020N

21102YN

2120210NX

212021YNX

213020

APPAREL

APPAREL QUICK REFERENCE

VESTS
PG 42-43

52205Y

522051STMSY

523050

523050X

533050

533050X

HOODIES / FLEECE / SOFTSHELL
PG 44-47

25005YBK

250050BK

25005GYBK

25005NBK

391050N

39105YN

39205YN

39305ON

36205YN

363050

TROUSERS
PG 48-53

18001N

18001CH

W17001N

170012BK

170012N

17003N

18002N

18002BK

180015NT

W170015NT

170035NT

170031OBKT

17002NT

SHORTS
PG 54-55

19001N

19001CH

W19001N

19002N

19002BK

APPAREL STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

The Waka Kotahi (NZTA) CoPTTM specifies two main colours with regards to use on New Zealand roads;

- Yellow: Garments for site traffic management supervisors - STMS; and
- Orange: Garments for all wearers other than supervisors.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (eg 100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabric's technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment (such as PPE/HRC high risk rating).
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

STMS GARMENTS

- The STMS sleeveless vest enables the person responsible at a worksite to be readily identified.
- The background material colour must be fluorescent yellow.
- STMS garments are limited to the STMS logo located on the upper front left side of the garment and as specified on the back of the garment and the technical recognition ID as appropriate. Other logos or labels may not be added.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS N

Class N are garments designed for night time use only. Class N has no fluorescent fabric but does have retro-reflective tape. Class N provides the wearer with high visibility at night when viewed under retro-reflected light such as vehicle headlights.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

CLASS NF (NON-FLUORESCENT BACKGROUND MATERIAL)

Refers to Non-fluorescent background material. Class NF materials do not have the fluorescent properties of class F materials and will provide reduced luminance for the wearer. Where for safety reasons a garment must be made from natural fibre which is unable to retain fluorescent colour class NF fabric can be used. These are often, but not limited to, cotton and FR blends.

AS/NZS 4399:2017 - SUN PROTECTIVE CLOTHING

Products have been tested to the Australian/New Zealand standard for sun protective clothing AS/NZS 4399:2017 (Ultraviolet Protection Factor).

APPAREL FAQ'S

HOW ARE YOUR RECYCLED POLYESTER T-SHIRTS MADE?
Plastic bottles are granulated (process of forming granules from a solid substance), then reduced down to minute particles or fragments which is then turned into a recycled yarn to make our t-shirts.

WHAT'S THE DIFFERENCE BETWEEN POLYESTER, COTTON OR POLYCOTTON?

- Polyester is a synthetic fabric that is tough and lightweight. Polyester also is a quick drying fabric and can be washed and dried at home with ease.
- Cotton is a natural fibre which is soft and breathable and known to be hypoallergenic. Being breathable means it is perfect for hotter conditions.
- Polycotton is a blend of synthetic polyester and natural cotton. The benefit of polycotton is the balance between the durability of polyester and breathability of cotton.

WHAT IS A WICKING PANEL ON YOUR POLOS?
Our polos have Moisture Wicking panels that push sweat and moisture to the outer surface of the fabric, which enables rapid drying. The wicking properties rely on 'capillary action' which in textiles is the movement of a liquid through tiny spaces within a fabric. Wicking polyester will always keep the wearer comfortable.

WHAT IS THE BENEFIT OF THE COTTON BACK POLOS?
You get the best of both worlds with a cotton backed fabric! The comfort, breathability, and odour control of cotton against your skin, and the moisture wicking, and fluorescent qualities of polyester on the outside.

WHAT IS UPF CLOTHING?
The UPF (Ultraviolet Protection Factor) is a numerical rating given to clothing to indicate how effectively the fabric blocks ultraviolet (UV) radiation. A UPF rating of 30 and over is classed as a 'Very Good' protection blocking about 96.0 – 97.4% of UV radiation. A UPF rating of 50 and over is classed as 'Excellent' protection blocking about 97.5% or more of UV radiation. Darker colours generally offer a greater protection against UV radiation.

WHY X BACK TAPE DESIGN OVER H TAPE DESIGN?
The X back tape design was brought in to help differentiate the front to back of a worker who may be working at night or in low light. Standard H tape designs are the same at the front and back. Utilising the X back design means you can easily distinguish whether a wearer is facing you or has their back to you.

WHAT IS ANTI-PILL FLEECE?
When a fleece is described as anti-pill this means the fabric has been processed in a way to reduce the amount of pills (little balls) appearing on the outside of your garment. Anti-pill fleece has a smoother better finish, will not unravel, and will last much longer than a standard fleece fabric.

ARE SOFTSHELL JACKETS WATERPROOF?
Our Softshell fabric has a membrane making the fabric itself waterproof up to about 20,000mm. However, the seams are not sealed on a softshell garment, so water can seep through in heavy rainfall.

WHAT ARE ARTICULATED KNEES ON TROUSERS?
Articulation at the knee is created in the pattern making and design process. Extra fabric is designed into the knee, often folded away at the seams, to allow for better movement with no constriction of the knee joint. Often trousers with an articulated knee will have a slight bend in the leg.

WHAT TROUSERS CAN I ADD KNEE PADS TO?
Styles 17003N, 18002N, 18002BK, 170035NT, 170031OBKT and 17002NT have discreet knee pad pockets.

WHAT ARE THE TELL-TALE SIGNS MY APPAREL IS NO LONGER COMPLIANT?
The most obvious signs of non-compliance are faded hi-vis fabric, cracking, or other damage to the retro-reflective tape. The best way to protect garments is to wash regularly, following care instructions, and to store them out of direct sunlight. A garment left in the car on a sunny day will fade and damage quickly. When your garments is not in use store in a dark place like a drawer or cupboard.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTY DOES APPAREL HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

APPAREL

ALL GOOD IN THE HOOD

YOU WEAR IT SO OUR OCEANS DON'T.

With more than 8 million tons of plastic bottles going into the sea each year it is estimated that in the year 2050 there will be more plastic than fish in the sea.

100% RECYCLED POLYESTER

100% RECYCLED POLYESTER

29005 T-SHIRT RECYCLED POLYESTER

Standards: Grey certified to AS/NZS 4399-2017 UPF 50+.
Black certified to AS/NZS 4399-2017 UPF 30.

- Wicking fabric for superior performance, comfort and ventilation
- Anti-microbial finish to eliminate odours
- Long enough to keep you covered when lifting your arms
- Grey is UPF 50+, Black is UPF 30

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 140gsm Wicking Recycled Polyester
- **Colour:** 29005GY (Grey), 29005BK (Black) / **Sizes:** 2XS-4XL, 6XL, 8XL

50+ GREY | 30 BLACK

100% RECYCLED POLYESTER

29105Y T-SHIRT DAY ONLY RECYCLED POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D.
AS/NZS 1906.4:2010 Class F. AS/NZS 4399-2017 UPF 30.

- Wicking fabric for superior performance, comfort and ventilation
- Anti-microbial finish to eliminate odours
- Long enough to keep you covered when lifting your arms
- Stay sunsafe with UPF 30

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 140gsm Wicking Recycled Polyester
- **Colour:** Yellow / **Sizes:** 2XS-4XL, 6XL, 8XL

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THIS SINGLET'S A SLAM DUNK

26105 SINGLET DAY ONLY POLYESTER MESH

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D.
AS/NZS 1906.4:2010 Class F.

- Basketball eyelet mesh
- Ribbing on neckline and armhole
- Side panelling
- Contrast navy hem

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 200gsm Polyester Mesh
- **Colour:** 26105ON (Orange/Navy), 26105YN (Yellow/Navy)
  Sizes: XS-5XL, 8XL

2310510 POLO DAY ONLY POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D.
AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- NEW Mountain Peak designer polo to set you apart from the rest
- UPF 30 lightweight wicking polyester
- Edge free chest pocket with pen partition
- Contrast colour helps to minimise grime build-up

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm 100% Polyester
- **Colour:** Orange (Black collar) / **Sizes:** S-3XL, 5XL, 8XL

231052Y POLO DAY ONLY POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D.
AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Mountain Peak designer polo to set you apart from the rest
- UPF 30 lightweight wicking polyester
- Edge free chest pocket with pen partition
- Contrast colour helps to minimise grime build-up

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics, Food Industry
- **Fabric:** 150gsm 100% Polyester
- **Colour:** Yellow (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

231051Y POLO DAY ONLY POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D.
AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Stripe designer polo to set you apart from the rest
- UPF 30 lightweight wicking polyester
- Edge free chest pocket with pen partition
- Contrast colour helps to minimise grime build-up

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm 100% Polyester
- **Colour:** Yellow (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

23105 POLO DAY ONLY POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pocket with button closure
- Contrast collar and lower front to minimise grime build-up
- UPF 30 Protection

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester
- **Colour:** 23105ON (Orange/Navy), 23105YN (Yellow/Navy)
  Sizes: S-3XL, 5XL

231011 POLO DAY ONLY QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Sports style collar and zipped chest pocket
- Wicking panels for comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** 231011O (Orange with Navy), 231011Y (Yellow with Navy)
  Sizes: S-3XL, 5XL, 8XL

W23101 POLO WOMEN'S DAY ONLY QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Zip pocket in side panel away from chest, longer back hem
- Wicking panels for comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** W23101ON (Orange/Navy), W23101YN (Yellow/Navy)
  Sizes: 8, 10, 12, 14, 16, 18, 24

231012 POLO DAY ONLY QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Vertical zipped chest pocket
- Wicking panels for comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** 231012ON (Orange/Navy), 231012YN (Yellow/Navy)
  Sizes: S-3XL, 5XL, 8XL

23205 POLO DAY/NIGHT POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Contrast colours to minimise grime build-up
- Reflective tape, UPF 30 Protection
- Chest pocket with button closure

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics, Food Industry
- **Fabric:** 150gsm Polyester
- **Colour:** 23205SPY (Spruce/Yellow) in sizes S-3XL, 5XL, 8XL, 23205YN (Yellow/Navy) & 23205ON (Orange/Navy) in sizes S-3XL,5XL

232012 POLO DAY/NIGHT QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Ultra-Flect™ multi-directional segmented tape
- Wicking panels for comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** 232012O (Orange with Navy), 232012Y (Yellow with Navy)
  Sizes: S-3XL, 5XL, 8XL

232011 POLO DAY/NIGHT QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Ultra-Flect™ multi-directional segmented tape
- Vertical zipped chest pocket, wicking panels for comfort & ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** 232011ON (Orange/Navy), 232011YN (Yellow/Navy)
  Sizes: S-3XL, 5XL, 8XL

W23201 POLO WOMEN'S DAY/NIGHT QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Ultra-Flect™ multi-directional segmented tape
- Zip pocket in side panel away from chest, longer back hem
- UPF 50+ main fabric, UPF 30 wicking panels for comfort/ventilation

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** W23201ON (Orange/Navy), W23201YN (Yellow/Navy)
  Sizes: 8, 10, 12, 14, 16, 18, 24

2330510 POLO TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pocket with button closure
- Reflective tape
- UPF 30 Protection

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL

233020 POLO TTMC-W17 QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Chest pocket with velcro closure flap, reflective tape
- UPF 50+ main fabric

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

243020 POLO TTMC-W17 QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Chest pocket with velcro closure flap
- Stretch reflective tape
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

243020X POLO TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Chest pocket with velcro closure flap
- Stretch reflective X-back tape for front-to-back differentiation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

23301OX POLO TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Reflective X-back tape for front-to-back differentiation
- UPF 50+ main fabric

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

243052O POLO TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pocket with button closure
- Reflective tape
- UPF 30 Protection

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL

24301O POLO TTMC-W17 QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Sports style collar, zipped chest pocket
- Ultra-Flect™ multi-directional segmented tape
- Wicking mesh panels for superior comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

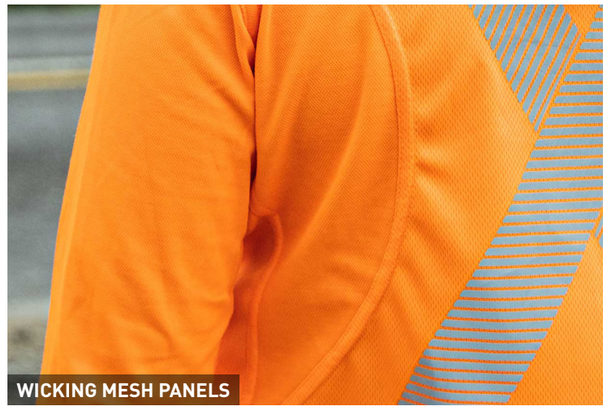
- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

W24301OX POLO WOMEN'S TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking mesh panels for superior comfort and ventilation
- Ultra-Flect™ segmented X-back tape for front-to-back differentiation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24, 26



22001BK SHIRT POLYCOTTON

- Concealed front tight-hold dome closure, domes are covered to reduce risk of marking objects
- Chest pocket with panel cover and pen slot
- Vented back with reduced layers to ensure true airflow
- Updated fit, cut and fabric

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Automotive, Transport & Logistics
- **Fabric:** 190gsm Polycotton Twill
- **Colour:** Black / **Sizes:** S-5XL

220012 SHIRT POLYCOTTON CONTRAST

- Concealed front tight-hold dome closure, domes are covered to reduce risk of marking objects
- Chest pocket with panel cover and pen slot
- Vented back with reduced layers to ensure true airflow
- Contrast colour panels
- Updated fit, cut and fabric

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Automotive, Transport & Logistics
- **Fabric:** 190gsm Polycotton Twill
- **Colour:** 220012BKGY (Black/Grey), 220012BKR (Black/Red)
  Sizes: S-5XL

21102 SHIRT DAY ONLY COTTON

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pockets with button flaps, velcro closure cell phone pocket
- Upper back and underarm venting
- Roll-up sleeves with button tab

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm 100% Cotton Drill
- **Colour:** 21102ON (Orange/Navy), 21102YN (Yellow/Navy)
  Sizes: S-4XL

212021 SHIRT DAY/NIGHT X-BACK COTTON

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pockets with button flaps, velcro closure cell phone pocket
- Upper back and underarm venting and roll-up sleeves
- Ultra-Flect™ X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm 100% Cotton Drill
- **Colour:** 212021ONX (Orange/Navy), 212021YNX (Yellow/Navy)
  Sizes: S-4XL

210012BK SHIRT POLYCOTTON

- Concealed front tight-hold dome closure, domes are covered to reduce risk of marking objects
- Chest pocket with panel cover and pen slot
- Vented back with reduced layers to ensure true airflow
- Updated fit, cut and fabric

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Automotive, Transport & Logistics
- **Fabric:** 190gsm Polycotton Twill
- **Colour:** Black / **Sizes:** S-5XL

210011 SHIRT POLYCOTTON CONTRAST

- Concealed front tight-hold dome closure, domes are covered to reduce risk of marking objects
- Chest pocket with panel cover and pen slot
- Vented back with reduced layers to ensure true airflow
- Contrast colour feature
- Updated fit, cut and fabric

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Automotive, Transport & Logistics
- **Fabric:** 190gsm Polycotton Twill
- **Colour:** 210011BKGY (Black/Grey), 210011BKR (Black/Red)
  Sizes: S-5XL

213020 SHIRT TTMC-W17 LIGHTWEIGHT COTTON

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pockets with button flaps, velcro closure cell phone pocket
- Roll-up sleeves with button tab
- Contrast collar and cuff to minimise grime build-up
- Ultra-Flect™ tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm 100% Cotton Drill
- **Colour:** Orange (Navy collar) / **Sizes:** S-5XL, 8XL

52205Y VEST DAY/NIGHT POLYESTER

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Yellow / **Sizes:** 3XS-6XL, 8XL

522051STMSY VEST STMS TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- Certified STMS badge on chest and back
- Reflective tape

- **Industries:** Roading
- **Fabric:** 100% Polyester
- **Colour:** Yellow / **Sizes:** S-6XL, 8XL

533050 VEST TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Collar for sun protection
- Reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** S-6XL, 8XL

533050X VEST TTMC-W17 X-BACK POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Tapered long sleeves
- Reflective X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** XS-6XL, 8XL

523050 VEST TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** 3XS-6XL, 8XL

523050X VEST TTMC-W17 X-BACK POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Reflective X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** XS-6XL, 8XL

25005 HOODED SWEATSHIRT CONTRAST

- Full zip front with #5 Vislon zip
- Chest pocket with zip on right side
- Secure zipped side pockets
- Wind resistant softshell contrast panels
- Thumb holes at sleeve cuffs to stop ride-up and keep hands warm

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 270gsm Polyester Fleece, 280gsm Softshell
- **Colour:** 25005OBK (Orange/Black), 25005YBK (Yellow/Black), 25005GYBK (Grey/Black), 25005NBK (Navy/Black)
  Sizes: XS-4XL, 6XL, 8XL

ZIPPED CHEST POCKET

THUMB HOLES

#5 VISLON ZIP FRONT

39305ON POLAR FLEECE TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- ¼ Zip front opening
- Zipped front pockets
- Pen pocket on sleeve
- Stretch reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300gsm Anti-pill fleece
- **Colour:** Orange/Navy / **Sizes:** XS-4XL, 6XL, 8XL

39105 POLAR FLEECE DAY ONLY

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F.

- ¼ Zip front opening
- Zipped front pockets
- Pen pocket on sleeve

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Warehousing, Transport & Logistics, Food Industry
- **Fabric:** 300gsm Anti-pill fleece
- **Colour:** 39105ON (Orange/Navy), 39105YN (Yellow/Navy) **Sizes:** XS-4XL, 6XL, 8XL

39205YN POLAR FLEECE DAY/NIGHT

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- ¼ Zip front opening
- Zipped front pockets
- Pen pocket on sleeve
- Stretch reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300gsm Anti-pill fleece
- **Colour:** Yellow/Navy / **Sizes:** XS-4XL, 6XL, 8XL

36205YN JACKET DAY/NIGHT SOFTSHELL

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front with storm flap cover, reflective tape
- Clear ID pocket on right-side chest
- Chest pocket under storm flap on left hand side
- Moulded velcro adjustment tabs on sleeves
- Zip off hood with peripheral vision adjuster

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 3-layer softshell fabric. Polyester and TPU membrane
- **Colour:** Yellow/Navy / **Sizes:** XS-4XL, 6XL

36305O JACKET TTMC-W17 SOFTSHELL

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front with storm flap cover, reflective tape
- Clear ID pocket on right-side chest
- Chest pocket under storm flap on left hand side
- Moulded velcro adjustment tabs on sleeves
- Zip off hood with peripheral vision adjuster

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 3-layer softshell fabric. Polyester and TPU membrane
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

18001 TROUSER LIGHTWEIGHT STRETCH POLYCOTTON

- Heavy duty Endura reinforcing on cuffs, and pockets
- YKK zip at fly with metal jean tack button
- Articulated knees and stretch for maximum movement
- Double layer crotch gusset with ventilation eyelets
- Full suite of cargo and zipped pockets, ruler pocket on right side

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** 18001N (Navy), 18001CH (Charcoal with reflective trim) **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

ENDURA TOUGH CRUTCH

W17001N TROUSER WOMEN'S LIGHTWEIGHT STRETCH POLYCOTTON

- Canvas weave fabric for toughness and elastane for stretch
- Heavy duty Endura reinforcing panels
- High waist for comfort and coverage, flat elastic waistband at back
- In-leg gusset to reduce friction and wear at seam
- Full suite of cargo pockets on both sides, flat hip pockets at the back
- Double layer reinforced knee

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24

ENDURA TOUGH CRUTCH

17003N TROUSER RIPSTOP COTTON

- EnduraLite reinforced, waistband, knees, cuffs, and pockets
- Cargo pockets on both sides, right leg with safety velcro pocket and left leg with ruler pocket
- Double button closure at waist
- Double layer knee with velcro closure for knee pads

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 210gsm 100% Cotton Ripstop Weave
- **Colour:** Navy / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

RIPSTOP ENDURALITE

170012 TROUSER DRIVERS POLYCOTTON

- Slanted front pockets, and fob pocket at waist
- Back pockets with flaps, and cargo pocket on left leg
- Elastic side adjusters hidden in waistband
- Internal metal clasp at inner waist - no external buttons

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 240gsm Polycotton Twill
- **Colour:** 170012BK (Black), 170012N (Navy) / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

18002 TROUSER COTTON

- Slanted front pockets, and wide tough belt loops
- Twin back pockets - one with Velcro flap
- Cargo pockets on both legs, ruler pocket on right side
- Double layer knee with pocket for knee pads

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 310gsm Cotton Twill
- **Colour:** 18002N (Navy), 18002BK (Black) / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

180015NT TROUSER LIGHTWEIGHT STRETCH POLYCOTTON TAPED

- Canvas weave fabric for toughness and elastane for stretch
- Heavy duty Endura reinforcing on cuffs and pockets, YKK zip at fly
- Articulated knees and stretch for maximum movement
- Double layer crotch gusset with ventilation eyelets
- Full suite of cargo and zipped pockets, ruler pocket on right side
- Ultra-Flect™ segmented tape at lower leg

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

ENDURA TOUGH CRUTCH

MULTIPLE POCKET OPTIONS

ELASTANE FOR STRETCH

ULTRA-FLECT™ SEGMENTED TAPE

170035NT TROUSER RIPSTOP COTTON TAPED

- EnduraLite reinforced, waistband, knees, cuffs, and pockets
- Cargo pockets on both sides, right leg with safety velcro pocket and left leg with ruler pocket
- Double layer knee with velcro closure for knee pads
- Ultra-Flect™ tape above knee and at calf

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 210gsm 100% Cotton Ripstop Weave
- **Colour:** Navy / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

RIPSTOP ENDURALITE

W170015NT TROUSER WOMEN'S LIGHTWEIGHT STRETCH POLYCOTTON TAPED

- Canvas weave fabric for toughness and elastane for stretch
- Heavy duty Endura reinforcing panels
- High waist for comfort and coverage, flat elastic waistband at back
- In-leg gusset to reduce friction and wear at seam
- Full suite of cargo pockets on both sides,flat hip pockets at the back
- Ultra-Flect™ segmented tape at lower leg

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24

ENDURA TOUGH CRUTCH

170031OBKT TROUSER RIPSTOP COTTON TAPED

- Contrast panels on high wear areas
- Cargo pocket on left leg, ruler pocket a thigh zip pocket on right leg
- Double layer knee with pocket for knee pads
- Wide tough belt loops and D-ring at waist
- Ultra-Flect™ angled tape at thigh and below knee

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 210gsm 100% Cotton Ripstop Weave
- **Colour:** Orange/Black / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

RIPSTOP

17002NT TROUSER COTTON TAPED

- Slanted front pockets, and wide tough belt loops
- Twin back pockets - one with velcro flap
- Cargo pockets on both legs, ruler pocket on right side
- Double layer knee with pocket for knee pads
- Ultra-Flect™ tape above knee

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 310gsm Cotton Twill
- **Colour:** Navy / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

W19001N SHORT WOMEN'S LIGHTWEIGHT STRETCH POLYCOTTON

- Canvas weave fabric for toughness and elastane for stretch
- Mid to high waist for comfort and coverage
- Flat elastic waistband at back, mid-thigh length
- Elastic adjuster tabs at waist
- Tough Crutch in-leg gusset to reduce friction and wear at seam
- Full suite of cargo pockets on both sides, flat hip pockets at the back

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

ENDURA TOUGH CRUTCH

19001 SHORT LIGHTWEIGHT STRETCH POLYCOTTON

- Canvas weave fabric for toughness and elastane for stretch
- Heavy duty Endura reinforcing panels, YKK zip at fly
- Crotch gusset with eyelets for increased ventilation
- Full suite of cargo and zipped pockets, ruler pocket on right side
- D-ring at waist and reflective trim at pockets

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** 19001N (Navy), 19001CH (Charcoal) / **Sizes:** 77, 82, 87, 92, 97, 102, 107, 112, 117, 122

ENDURA TOUGH CRUTCH

19002 SHORT COTTON

- Slanted front pockets, and wide tough belt loops
- Twin back pockets on back - one with velcro flap
- Cargo pockets on both legs, ruler pocket on right side
- Button waist closure

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 310gsm Cotton Twill
- **Navy:** 19002N in sizes 82, 87, 92, 97, 102, 107, 112, 117, 122
  Black: 19002BK in sizes 77, 82, 87, 92, 97, 102, 107, 112, 117

OVERALLS

TTMC-W17 / DAY/NIGHT / DAY ONLY
NON SAFETY / DUSTCOATS

Most industrial overalls may look the same - but Bison overalls simply stand out from the rest. Design features, style, comfort, durability and innovation set these overalls apart. Wear Bison overalls and you'll know it!

HANDY TIP: To protect your zip, slide it all the way down before putting on your overalls.

BISON
WORKZONE

OVERALLS

OVERALLS QUICK REFERENCE

TTMC-W17
PG 62-63

4330230N

4330220N

43302ONX

DAY/NIGHT
PG 64

43201RBO

43201YRB

4520220N

4320210N

432021YN

DAY ONLY
PG 65

43101RBO

43101SPY

43101YRB

431021ON

431021YN

44102ON

NON SAFETY / DUSTCOAT
PG 66-69

430011BKGY

430011BKR

430011BKRB

430011RBGY

430021BKGY

430012CH

430012N

430012RB

44002N

430023BK

430023N

410022ON

41001ON

41001SPY

41001YN

420021ON

41001BK

41001RB

42002N

380014RB

38002N

OVERALLS

OVERALLS STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

The Waka Kotahi (NZTA) CoPTTM specifies two main colours with regards to use on New Zealand roads:

- Yellow: Garments for site traffic management supervisors - STMS; and
- Orange: Garments for all wearers other than supervisors.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (e.g.100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabric's technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment (such as PPE/HRC high risk rating).
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

STMS GARMENTS

- The STMS sleeveless vest enables the person responsible at a worksite to be readily identified.
- The background material colour must be fluorescent yellow.
- STMS garments are limited to the STMS logo located on the upper front left side of the garment and as specified on the back of the garment and the technical recognition I.D. as appropriate. Other logos or labels may not be added.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS N

Class N are garments designed for night time use only. Class N has no fluorescent fabric but does have retro-reflective tape. Class N provides the wearer with high visibility at night when viewed under retro-reflected light such as vehicle headlights.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

CLASS NF (NON-FLUORESCENT BACKGROUND MATERIAL)

Refers to Non-fluorescent background material. Class NF materials do not have the fluorescent properties of class F materials and will provide reduced luminance for the wearer. Where for safety reasons a garment must be made from natural fibre which is unable to retain fluorescent colour class NF fabric can be used. These are often, but not limited to, cotton and FR blends.

AS/NZS 4399:2017 - SUN PROTECTIVE CLOTHING

Products have been tested to the Australian/New Zealand standard for sun protective clothing AS/NZS 4399:2017 (Ultraviolet Protection Factor).

OVERALLS FAQ'S

SHOULD I WEAR A POLYCOTTON OR COTTON OVERALL?
This depends on your preference, nature of work and environment. The below summarises the difference between the two fabrics:

- Polycotton is a blend of natural cotton and synthetic polyester. The benefit of polycotton is the balance between breathability (cotton) and durability (polyester).
- Cotton is a natural fibre which is soft and breathable and known to be hypoallergenic. Being breathable means it is perfect for hotter conditions.

ARE THERE WINTER AND SUMMER OVERALLS?
Overalls are year round garments. We do use some specific fabrics: 190-210gsm fabrics which may be more comfortable in the summer, and heavier fabrics 240-310gsm that may be warmer during the winter months.

Because overalls are meant to be worn over garments a lot of what keeps you comfortable is what you wear underneath. We suggest in summer lightweight shorts and t-shirts or singlets, and in the winter all your base layer plus trousers and a sweatshirt. You may want to wear an overall a size up in the winter to comfortably fit layers.

WHAT ARE THE TELL-TALE SIGNS MY OVERALLS ARE NO LONGER COMPLIANT?
The most obvious signs of non-compliance are faded hi-vis fabrics and reflective tape that has become hazy, or is otherwise damaged. The best way to protect garments is to wash regularly, following care instructions and to store them out of direct sunlight. A garment repeatedly exposed to direct sunlight will fade and breakdown at an accelerated rate. When garments are not in use we recommend storing in a clean dark place like a locker, cupboard or gear bag.

WHAT IS A YKK NON-CONDUCTIVE TWO-WAY ZIP?
A zip made of plastic with two sliders (heads), that can be opened from the top or the bottom that is non-conductive e.g. not able to conduct heat or electricity.

WHY X BACK TAPE DESIGN OVER H TAPE DESIGN?
The X back tape design was brought in to help differentiate the front to back of a worker who may be working at night or in low light. Standard H tape designs are the same at the front and back. Utilizing the X back design means you can easily distinguish whether a wearer is facing you or has their back to you.

WHAT IS UPF CLOTHING?
The UPF (Ultraviolet Protection Factor) is a numerical rating given to clothing to indicate how effectively the fabric blocks ultraviolet (UV) radiation. A UPF rating of 30 and over is classed as a 'Very Good' protection blocking about 96.0 – 97.4% of UV radiation. A UPF rating of 50 and over is classed as 'Excellent' protection blocking about 97.5% or more of UV radiation. Darker colours generally offer a greater protection against UV radiation.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTY DO OVERALLS HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

4330220N OVERALL WORKZONE TTMC-W17 LIGHTWEIGHT COTTON ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK non-conductive two-way zip, Ultra-Flect™ tape
- Zipped chest pockets, internal phone pocket, vented back panels
- Cargo pocket on left leg, tool pocket on right leg

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 210gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

4330230N OVERALL WORKZONE TTMC-W17 LIGHTWEIGHT COTTON ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Non-conductive two-way zip, reflective tape
- Chest pockets: Vertical zip on right hand side, pocket with flap left hand side, cargo pocket on right leg, adjustable button cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 190gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

433020NX OVERALL WORKZONE TTMC-W17 X-BACK COTTON ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.1996.

- Chest pockets: Flap with velcro closure on right hand side, pocket with pen partition on left, double comm's loop on chest
- Ultra-Flect™ X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

43201 OVERALL WORKZONE DAY/NIGHT POLYCOTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK two-way zip, chest pockets, cargo pockets, Ultra-Flect™ tape

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 240gsm Polycotton, 65/35 blend
- **Colour:** 43201RBO (Royal Blue/Orange) in sizes 76R, 80R 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R, 142R
  43201YRB (Royal Blue/Yellow) in sizes 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

4520220N OVERALL WORKZONE DAY/NIGHT COTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK two-way zip, dome adjustment on sleeves, Ultra-Flect™ tape
- Chest pockets, internal phone pocket, cargo pockets on both legs
- Back pocket and tool pocket on right leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

43101 OVERALL WORKZONE DAY ONLY POLYCOTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK two-way zip, dome adjustment on sleeves
- Chest pockets, internal phone pocket, tool pocket on right leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing
- **Fabric:** 240gsm Polycotton, 65/35 blend
- **Colour:** 43101RBO (Royal Blue/Orange), 43101SPY (Spruce/Yellow), 43101YRB (Royal Blue/Yellow) / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

432021 OVERALL WORKZONE DAY/NIGHT COTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK two-way zip, dome adjustment on sleeves, Ultra-Flect™ tape
- Chest pockets, internal phone pocket, cargo pockets on left leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** 432021ON (Orange/Navy) in sizes 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R / 432021YN (Yellow/Navy) in sizes 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

431021 OVERALL WORKZONE DAY ONLY COTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK two-way zip, dome adjustment on sleeves
- Chest pockets, internal phone pocket, tool pocket on right leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** 431021ON (Orange/Navy), 431021YN (Yellow/Navy)
  Sizes: 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

44102ON OVERALL WORKZONE DAY ONLY COTTON DOME

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Metal dome front closure, dome adjustment on sleeves
- Chest pockets, internal phone pocket
- Back pocket and tool pocket on right leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

430012 OVERALL WORKZONE POLYCOTTON ZIP

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg, YKK rust proof metal zip

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 260gsm Polycotton, 65/35 blend
- **Colour:** 430012CH (Charcoal) in sizes 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R / 430012N (Navy) in sizes 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R 430012RB (Royal Blue) in sizes 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

50+

430011 OVERALL WORKZONE EURO POLYCOTTON ZIP

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK rust proof metal zip, upper back and underarm venting
- Chest pockets with velcro tabs, velcro tab adjusters at sleeves

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing
- **Fabric:** 240gsm Polycotton, 65/35 blend
- **Colour:** 430011BKGY (Black/Grey) in sizes 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R, 142R / 430011BKR (Black/Red) and 430011BKRB (Black/Royal Blue) in sizes 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R / 430011RBGY (Blue/Grey) in sizes 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

50+

430021BKGY OVERALL WORKZONE EURO COTTON ZIP

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK rust proof metal zip, upper back and underarm venting
- Internal knee pad pockets
- Back pocket and tool pocket on right leg
- Chest pockets with velcro tabs, velcro tab adjusters at sleeves

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Black/Grey / **Sizes:** 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R, 142R

50+

44002N OVERALL WORKZONE COTTON DOME

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Metal dome front closure
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Navy / **Sizes:** 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

50+

430023 OVERALL WORKZONE COTTON ZIP

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK rust proof metal zip
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 300gsm 100% Cotton
- **Colour:** 430023BK (Black) in sizes 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R / 430023N (Navy) in sizes 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

50+

4100220N OVERALL WORKZONE EASY ACTION COTTON ZIP TAPED

- YKK non-conductive two-way zip
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg
- Elastic shoulder straps
- Ultra-Flect™ reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

41001 OVERALL WORKZONE EASY ACTION POLYCOTTON ZIP

- YKK rust-proof metal zip
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Elastic shoulder straps

- **Industries:** Construction & Trades, Manufacturing
- **Fabric:** 260gsm Polycotton, 65/35 blend
- **Colour:** 41001ON (Orange/Navy) in sizes 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R / 41001SPY (Spruce/Yellow) in sizes 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R / 41001YN (Yellow/Navy) in sizes 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

420021ON OVERALL WORKZONE EASY ACTION COTTON DOME

- Metal dome front closure
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg
- Elastic shoulder straps

- **Industries:** Construction & Trades, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Navy / **Sizes:** 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

41001 OVERALL WORKZONE EASY ACTION POLYCOTTON ZIP

- YKK rust-proof metal zip
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg
- Elastic shoulder straps

- **Industries:** Construction & Trades, Manufacturing
- **Fabric:** 260gsm Polycotton, 65/35 blend
- **Colour:** 41001BK (Black) in sizes 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R / 41001RB (Royal Blue) in sizes 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

42002N OVERALL WORKZONE EASY ACTION COTTON DOME

- Metal dome front closure
- Pocket with flap on right hand side
- Pocket with pen partition and phone pocket on left hand side
- Back pocket and tool pocket on right leg
- Elastic shoulder straps

- **Industries:** Construction & Trades, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Navy / **Sizes:** 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

380014RB DUSTCOAT WORKZONE POLYCOTTON

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Metal dome front closure
- Chest pocket with pen partition and phone pocket on left hand side
- Large pockets on front
- Split at back hem

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 260gsm Polycotton, 65/35 blend
- **Colour:** Royal Blue / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

38002N DUSTCOAT WORKZONE COTTON

Standards: Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Metal dome front closure
- Chest pocket with pen partition and phone pocket on left hand side
- Large pockets on front
- Split at back hem

- **Industries:** Construction & Trades, Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

RAINWEAR

JACKETS / VESTS / TROUSERS / BIB TROUSERS

Our wet weather gear provides a range of options when it comes to keeping you dry and comfortable. Our Bison Extreme rainwear, 25,000mm and 30,000+mm, have a 12 hour waterproof guarantee. Our Bison Stamina rainwear, 20,000mm, has a 6 hour waterproof guarantee. The Stamina range also includes PU and PVC rainwear. When you need to battle the elements to keep you dry and warm we have you covered.

BISON EXTREME 12HR WATERPROOF GUARANTEE

BISON STAMINA 6HR WATERPROOF GUARANTEE

RAINWEAR

RAINWEAR QUICK REFERENCE

JACKETS
PG 76-83

313052ON

W313050N

313051OX

32305O

323050X

34305O

323000N

312052YN

34205YN

322050N

32205YN

51205ON

51205YN

32200YN

33009Y

33009GN

VESTS
PG 86

513050

513050X

512051ON

512051YN

TROUSER AND OVER-TROUSER
PG 86-87

140050NT

14005YNT

140053ONT

140051OT

140051YT

140054NT

15009Y

15009GN

BIB TROUSER
PG 88-89

120050NT

120050BKT

120051OT

120051YT

12000NT

13009Y

13009GN

RAINWEAR STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

The Waka Kotahi (NZTA) CoPTTM specifies two main colours with regards to use on New Zealand roads:

- Yellow: Garments for site traffic management supervisors - STMS; and
- Orange: Garments for all wearers other than supervisors.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (eg 100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabric's technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment (such as PPE/HRC high risk rating).
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

STMS GARMENTS

- The STMS sleeveless vest enables the person responsible at a worksite to be readily identified.
- The background material colour must be fluorescent yellow.
- STMS garments are limited to the STMS logo located on the upper front left side of the garment and as specified on the back of the garment and the technical recognition I.D. as appropriate. Other logos or labels may not be added.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS N

Class N are garments designed for night time use only. Class N has no fluorescent fabric but does have retro-reflective tape. Class N provides the wearer with high visibility at night when viewed under retro-reflected light such as vehicle headlights.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

CLASS NF (NON-FLUORESCENT BACKGROUND MATERIAL)

Refers to Non-fluorescent background material. Class NF materials do not have the fluorescent properties of class F materials and will provide reduced luminance for the wearer. Where for safety reasons a garment must be made from natural fibre which is unable to retain fluorescent colour class NF fabric can be used. These are often, but not limited to, cotton and FR blends.

AS/NZS 4399:2017 - SUN PROTECTIVE CLOTHING

Products have been tested to the Australian/New Zealand standard for sun protective clothing AS/NZS 4399:2017 (Ultraviolet Protection Factor).

EN 343 PROTECTIVE CLOTHING - PROTECTION AGAINST RAIN

EN 343 is a European Standard for protective clothing that outlines a minimum level of protection against wet weather, and is tested for its ability to withstand heavy water pressure and for its breathability.

RAINWEAR FABRICS

BISON EXTREME RAINWEAR

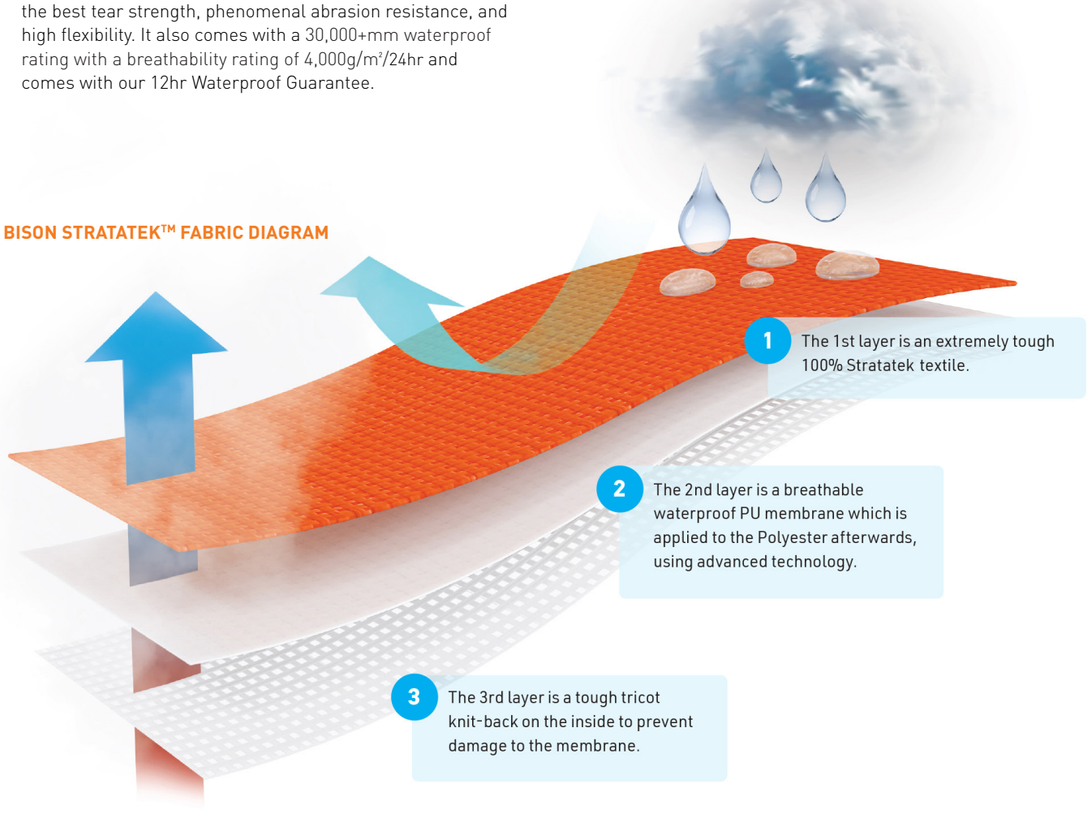
STAY DRY FOR 12HRS IN OUR BISON EXTREME RAINWEAR!

Bison Extreme has heat applied segmented tape and one of the highest waterproof ratings in the market. Our new 450D fabric is our toughest yet, with more flexibility, comfort and the best water resistance with 30,000+mm waterproof rating. This means it's going to take 30 metres of water pressure before the Extreme fabric lets water through!

Bison Stratatek™ fabric is trialled in the harshest New Zealand weather conditions. It's subjected to extreme testing which exceeds the most stringent test standards. Bison Stratatek™ is made using a 3-layer construction. The outer layer is an extremely tough polyester oxford weave fabric. The second layer is a breathable, waterproof, microporous membrane. The third layer is a flexible tricot knit-back, which encases the membrane to improve comfort and prevent damage.

- Bison Extreme 300D fabric has a 25,000mm waterproof rating with a breathability rating of 4,000g/m²/24hr and comes with our 12hr Waterproof Guarantee.
- Bison Extreme 450D fabric is our toughest rainwear yet with the best tear strength, phenomenal abrasion resistance, and high flexibility. It also comes with a 30,000+mm waterproof rating with a breathability rating of 4,000g/m²/24hr and comes with our 12hr Waterproof Guarantee.

BISON STRATATEK™ FABRIC DIAGRAM



BISON STAMINA RAINWEAR

STAY DRY FOR 6HRS IN OUR BISON STAMINA RAINWEAR!

Our Bison Stamina 300D range packs a punch with a 20,000+mm waterproof rating. This means it's going to take 20 metres of water pressure before the fabric lets water through! The Stamina range has a variety of fabric options with 300D and 600D Poly Oxford fabric with PU backing, Stretch PU and Premium Weight PVC.

- Bison Stamina with 300D and 600D Poly Oxford fabric with PU backing has a 20,000mm waterproof rating and comes with our 6hr Waterproof Guarantee.
- Bison Stamina with Stretch PU fabric has up to 20,000mm waterproof rating and comes with our 6hr Waterproof Guarantee.
- Bison Stamina with PVC fabric does NOT come with our 6hr Waterproof Guarantee but is still waterproof.

RAINWEAR FAQ'S

WHAT IS THE DIFFERENCE BETWEEN WATERPROOF AND SHOWERPROOF?
All rainwear starts out with a waterproof fabric – at Bison this ranges from 16,000mm to 30,000+mm. At Bison the construction of a garment determines whether the final product is waterproof or showerproof.

Waterproof for us means you stay dry. All Bison Rainwear is completely seam sealed meaning there is no space for water to enter the garment through stitch holes or seams. The products have also been designed in a way to reduce seams to eliminate water penetration.

Showerproof means you stay dry but not for extended periods of time. Garments like our Softshells, 363050, use fabric that achieves a waterproof rating of up to 20,000mm. Because softshell has a fleece inner the seams are unable to be seam sealed. Extended periods in the rain, or short periods in heavy rain, water will seep through the seams.

WHAT ARE WATERPROOF RATINGS?
For any fabric to be considered waterproof it must be able to withstand the pressure of a column of water 'standing' on the fabric without leaking. This is tested in a laboratory using the hydrostatic head or water column test method. The test is done using water column pressure, equal to the height of a column of water, a fabric can hold before water starts to seep through it. A water column of 1 meter is equal to 1000mm of pressure.

- 450D Stratatek™ fabric has a waterproof rating of 30,000+mm
- 300D Stratatek™ fabric has a waterproof rating of 25,000mm
- 300D and 600D Poly Oxford has a waterproof rating of 20,000mm
- Stretch PU fabric has a waterproof rating up to 20,000mm

WHAT DOES THE 'D' MEAN ON THE FABRIC?
The 'D' in Bison Stamina and Extreme stands for Denier. Denier is basically the thickness of the yarn/thread that makes a fabric. Just having a thicker thread doesn't always mean a tougher fabric.

Why bigger is not better. Yes thicker yarns on their own will be stronger, but in fabric form, the thickness of a yarn does not necessarily improve weight or strength. A fabric woven with a finer yarn contains more 'strands' of yarn per square cm. This can mean more flexibility for comfort and smaller gaps in the weave which can increase water resistance. A thicker yarn, when woven into a fabric has less cross over points with larger gaps. This can weaken tear strength, and encourage water penetration.

We love our 300D Stamina products for lightness and movement and our 600D for grunt, but we found the sweet spot with our 450D Extreme Rainwear. Not only is our Extreme Rainwear the toughest, most waterproof and most durable rainwear in our range it is also has the best comfort to protection ratio. Our 450D has better warp and weft tear strength than 600D and incredibly high abrasion - you'll never wear through the fabric. You'll stay dry for the life of the garment in our 450D Extreme rainwear which has the best water resistance after wear than both our 600D and 300D!

WHAT LINING DOES THE BISON RAINWEAR HAVE?
- 450D Extreme Jackets = Removable sleeveless fleece inner. Tricot lining in jacket.
- 450D Extreme Trouser/Overtrouser/Bib Trouser = Polyester knit tricot lining.
- 300D Extreme Jacket = Polyester knit tricot lining.
- 300D Stamina Jackets = 100% polyester knit mesh lining in jacket.
- 300D Stamina 5-in-1 Jackets = Vest has fleece inner. 100% polyester knit mesh lining in jacket.
- 300D Stamina Vests/Vest with sleeves = Fleece inner.
- PU/PVC – No lining.

DOES TAPE EFFECT THE WATERPROOF OF RAINWEAR?
Because all our rainwear is seam sealed, on styles where the reflective tape is stitched, all stitch lines are sealed. Our Bison Extreme Rainwear uses heat applied Ultra-Flect™ tape that doesn't require stitching.

SHOULD I WEAR PANTS UNDER AN OVERTROUSER OR BIB TROUSER?
The fitting of an overtrouser and bib trouser are designed to be worn over pants.

WHAT ARE STORM CUFFS?
Storm cuffs are a tight fitting inner cuffs which prevents rain or wind from getting inside a jacket.

WHAT IS A STORM FLAP AND RAIN GUTTER?
A storm flap covers the zips from water seeping in. A rain gutter is a channel to let any water escape.

HOW AM I BEST TO CARE FOR MY RAINWEAR?
The fabric needs to be thoroughly dry prior to folding or storage. Being left wet will cause premature breakdown and leakage. Acids found in animal waste can have adverse effects on this fabric if left in contact for extended periods and should be removed by machine washing.

Warm water machine wash on gentle cycle. Do not bleach. Do not dry clean. Do not tumble dry. Do not iron.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTY DOES RAINWEAR HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

RAINWEAR
JACKETS

3130520N JACKET EXTREME TTMC-W17

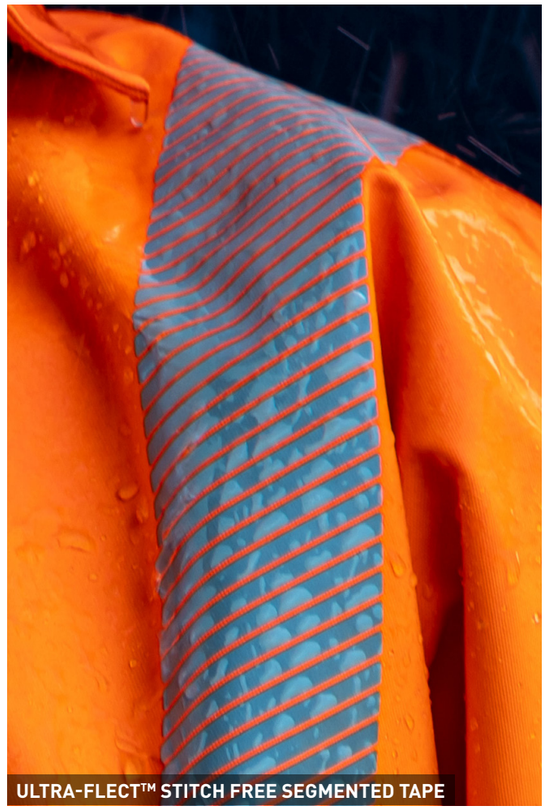
Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, removable fleece liner
- 450D 3-layer Stratatek fabric has best tear strength, phenomenal abrasion resistance and high flexibility, neoprene storm cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Orange/Navy / **Sizes:** S-4XL, 6XL, 8XL

VISION ADJUSTER DESIGNED TO WORK WITH HARD HATS

DOUBLE STORM FLAP AND RAIN-GUTTER


ULTRA-FLECT™ STITCH FREE SEGMENTED TAPE

REIGNING EXTREME WOMEN'S JACKET

3130510X JACKET EXTREME TTMC-W17 X-BACK

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:25,000mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (25,000mm waterproof rating)
- Ultra-Flect™ Segmented X-back tape for front-to-back differentiation, zip off/foldaway hood
- Neoprene storm cuffs, two-way YKK zip with double storm flap

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D 3 layer Stratatek / **Lining:** Polyester knit tricot lining
- **Colour:** Orange/Black / **Sizes:** S-4XL, 6XL, 8XL

W31305ON JACKET EXTREME WOMEN'S TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, removable fleece liner, removable hood
- 450D 3-layer Stratatek fabric has best tear strength, phenomenal abrasion resistance, and high flexibility, neoprene storm cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Orange/Navy / **Sizes:** 8, 10, 12 , 14, 16, 18, 20, 22

323050 JACKET STAMINA TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Two-way zip with double storm flap and rain-gutter
- Arms stay dry with Storm cuffs, Ultra-Flect™ tape, fold away hood
- Has internal zip designed to take the Bison Stamina 513050

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Polyester knit mesh lining
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

323050X JACKET STAMINA TTMC-W17 X-BACK

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Ultra-Flect™ X-back tape for front-to-back differentiation
- Polyester mesh lining and neoprene storm cuffs, fold away hood
- Has internal zip designed to take Bison Stamina 51305OX

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Polyester knit mesh lining
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

343050 JACKET STAMINA TTMC-W17 5-IN-1 VEST COMBO

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Outer jacket: Polyester mesh lining, hideaway hood, large front pockets
- Internal jacket, that zips into the outer jacket, is a fleece lined vest with removeable sleeves, Ultra-Flect™ tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Inner fleece, Polyester mesh
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

323000N JACKET STAMINA PU TTMC-W17 LIGHTWEIGHT

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water resistance up to H20:20,000mm.

- 6hr Waterproof Guarantee (Up to 20,000mm waterproof rating)
- Comfortable, light and flexible stretch PU
- Eyelets for ventilation, reflective tape
- Hideaway hood – space in collar to tuck away hood

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** Stretch PU fabric
- **Colour:** Orange/Navy / **Sizes:** S-4XL, 6XL, 8XL

312052YN JACKET EXTREME DAY/NIGHT

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN.
AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm.
Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, storm cuffs, adjustable hood
- 450D Stratatek fabric has best tear strength, phenomenal abrasion resistance, and high flexibility

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Yellow/Navy / **Sizes:** S-4XL, 6XL, 8XL

COMBINE WITH 512051 OR 51205

32205 JACKET STAMINA DAY/NIGHT

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN.
AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm.
Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Two-way zip with double storm flap and rain-gutter, Ultra-Flect™ tape
- Has internal zip designed to take the Bison Stamina Vest 512051 (V17)

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Polyester knit mesh lining
- **Colour:** 32205ON (Orange/Navy), 32205YN (Yellow/Navy)
  Sizes: S-4XL, 6XL, 8XL

ZIPS INSIDE 32205

51205 JACKET STAMINA DAY/NIGHT ZIP OFF SLEEVES

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN.
AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm.
Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- YKK zips on removeable sleeves, removable hood, Ultra-Flect™ tape
- Fleece lined front pockets, chest pocket with flap on left hand side

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Fleece lined vest/sleeves
- **Colour:** 51205ON (Orange/Navy), 51205YN (Yellow/Navy)
  Sizes: S-4XL, 6XL

34205YN JACKET STAMINA DAY/NIGHT 5-IN-1 VEST COMBO

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN.
AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm.
Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Outer jacket: Polyester mesh lining, hideaway hood, large front pockets
- Internal jacket, that zips into the outer jacket, is a fleece lined vest with removeable sleeves, Ultra-Flect™ tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Inner fleece, Polyester mesh
- **Colour:** Yellow/Navy / **Sizes:** S-4XL, 6XL, 8XL

32200YN JACKET STAMINA PU DAY/NIGHT LIGHTWEIGHT

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN.
AS/NZS 1906.4:2010 Class F. Water resistance up to H20:20,000mm

- 6hr Waterproof Guarantee (Up to 20,000mm waterproof rating)
- Comfortable, light and flexible stretch PU
- Eyelets for ventilation, reflective tape
- Hideaway hood – space in collar to tuck away hood
- Neoprene cuffs to keep your arms dry

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** Stretch PU fabric
- **Colour:** Yellow/Navy / **Sizes:** S-4XL, 6XL, 8XL

33009 JACKET STAMINA PVC

- Zip front and domed storm flap
- Storm protection with tie hood
- Arms stay dry with elasticated storm cuffs
- Two storm pockets with storm flaps
- Vented back and under arms

- **Industries:** Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 0.48mm Premium Weight PVC
- **Colour:** 33009Y (Yellow), 33009GN (Green) / **Sizes:** S-6XL

RAINWEAR

WHEN IT RAINS BISON REIGNS!

513050 VEST STAMINA TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Wider shoulder for added protection, Ultra-Flect™ tape
- Dual entry fleece lined front pockets
- Vest zips inside Bison Stamina 323050 (46RJKT) & 323050X (JXPOP)

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Fleece
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

513050X VEST STAMINA TTMC-W17 X-BACK

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Ultra-Flect™ X-back tape for front-to-back differentiation
- Dual entry fleece lined front pockets
- Vest zips inside Bison Stamina 323050 (46RJKT) & 323050X (JXPOP)

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Fleece
- **Colour:** Orange / **Sizes:** S-4XL, 6XL, 8XL

140053ONT OVERTROUSER EXTREME

Standards: AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- 450D Stratatek fabric has best tear strength, phenomenal abrasion resistance, and high flexibility
- Ultra-Flect™ Segmented tape
- Elasticated waist, zipped gussets at ankle, cargo pocket on right leg

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 450D, 3 layer Stratatek fabric / **Lining:** Polyester knit tricot
- **Colour:** Orange/Navy / **Sizes:** S-4XL, 6XL, 8XL

140051 OVERTROUSER STAMINA

Standards: AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Elasticated waist, reinforced crotch
- Zipped gusset at ankle, Ultra-Flect™ tape
- Domes on cuffs help to adjust fit to slip inside gumboots

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford, PU backing
- **Colour: Orange:** 140051OT in sizes XS-4XL, 6XL, 8XL
  Yellow: 140051YT in sizes S-4XL, 6XL, 8XL

512051 VEST STAMINA DAY/NIGHT

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Wider shoulder for added protection, Ultra-Flect™ tape
- Vest zips inside Bison Stamina 32205 (46NJKT) as an option

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Fleece
- **Colour:** 512051ON (Orange/Navy), 512051YN (Yellow/Navy)
  Sizes: XS-4XL, 6XL, 8XL

14005 TROUSER EXTREME

Standards: AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- 450D Stratatek fabric has best tear strength, phenomenal abrasion
- Elasticated sides on the waistband, Ultra-Flect™ Segmented tape
- YKK zipped ankle gussets, left leg cargo pocket, right leg tool pocket

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Fabric:** 450D, 3 layer Stratatek fabric / **Lining:** Polyester knit tricot
- **Colour:** 14005ONT (Orange/Navy), 14005YNT (Yellow/Navy)
  Sizes: XS-4XL, 6XL, 8XL

140054NT OVERTROUSER STAMINA

Standards: Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- 600D Poly Oxford for a higher abrasion resistance
- Elasticated waist, completely seam sealed
- Zipped gussets at lower leg
- Ultra-Flect™ tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 600D Poly Oxford with PU backing
- **Colour:** Navy / **Sizes:** S-4XL, 6XL, 8XL

15009 OVERTROUSER STAMINA PVC

- Drawstring waist with cord stop
- Side pockets

- **Industries:** Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 0.48mm Premium Weight PVC
- **Colour:** 15009Y (Yellow), 15009GN (Green) / **Sizes:** S-6XL

12005 BIB TROUSER EXTREME

Standards: AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Waterproof pocket zips, chest pocket with zip on outer and inner chest
- Abrasion resistant panels at knee, YKK zip gusset at ankle
- Adjustable straps and tabs at waist, Ultra-Flect™ Segmented tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 450D, 3 layer Stratatek fabric / **Lining:** Polyester knit tricot
- **Colour:** 12005ONT (Orange/Navy), 12005OBKT (Orange/Black)
  Sizes: S-4XL, 6XL

120051 BIB TROUSER STAMINA

Standards: AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Waterproof zips on fly and pockets, zipped gusset at ankle
- Pocket with flap on chest, Ultra-Flect™ tape
- Elastic adjustable shoulder straps

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford with PU backing
- **Colour:** 120051OT (Orange), 120051YT (Yellow)
  Sizes: S-4XL, 6XL, 8XL

12000NT BIB TROUSER STAMINA PU LIGHTWEIGHT TAPED

Standards: Water resistance up to H20:20,000mm.

- 6hr Waterproof Guarantee (Up to 20,000mm waterproof rating)
- Comfortable, light and flexible stretch PU
- Adjustable elastic shoulder straps
- Large front pocket, reflective tape
- Adjustable hems with domes
- Completely seam sealed

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** Stretch PU
- **Colour:** Navy / **Sizes:** S-4XL, 6XL, 8XL

13009 BIB TROUSER STAMINA PVC

- Elastic adjustable shoulder straps
- Internal chest pocket
- Elasticated back waist
- Reinforced front thigh

- **Industries:** Agriculture & Forestry, Manufacturing, Food Industry
- **Fabric:** 0.48mm Premium Weight PVC
- **Colour:** 13009Y (Yellow), 13009GN (Green) / **Sizes:** S-6XL

HIGH RISK

APPAREL / OVERALLS / RAINWEAR

Whether you need Arc Rated (AR), Flame Retardant (FR) or Antistatic (AS) workwear, our Arcguard and Bison High Risk garments provide the ultimate protection for the environment you're in. No stone is left unturned by our technical department when developing and testing high risk fabrics.

All of our Arcguard garments exceed the 8.0 cal/cm² minimum requirement for PPE 2, so you know you're in safe hands when you wear Arcguard Workwear!

ARCGUARD BY BISON

BISON STAMINA

HIGH RISK

HIGH RISK QUICK REFERENCE

APPAREL
PG 102-107

363170N

243120N

243170NX

212170N

21217YN

21312RB0

2131710N

213172RB0

213170N

213122RB0X

253170X

25217YN

170171NT

17012RBT

170121NT

43317RB0

433173ON

433121RB0

43312RB0X

432120N

43212YN

432121RB0

4311210N

RAINWEAR
PG 112-119

32317ONX

32217YN

513170X

51217YN

140170T

14017NT

12017NT

323151O

51315O

140150BKT

120150T

HIGH RISK

HIGH RISK STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (eg 100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabric's technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment (such as PPE/HRC high risk rating).
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS N

Class N are garments designed for night time use only. Class N has no fluorescent fabric but does have retro-reflective tape. Class N provides the wearer with high visibility at night when viewed under retro-reflected light such as vehicle headlights.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use and retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

CLASS NF (NON-FLUORESCENT BACKGROUND MATERIAL)

Refers to non-fluorescent background material. Class NF materials do not have the fluorescent properties of class F materials and will provide reduced luminance for the wearer. Where for safety reasons a garment must be made from natural fibre which is unable to retain fluorescent colour class NF fabric can be used. These are often, but not limited to, cotton and FR blends.

NFPA 70E

Standard for Electrical Safety in the Workplace. NFPA 70E is a globally used American consensus standard that addresses electrical safety in the workplace. It explains how to protect electrical workers against electrical hazards. This standard is revised every three years.

One revision you will start to notice is the change from HRC to PPE. In 2015 NFPA 70E eliminated the term Hazard Risk Category (HRC) and replaced it with Personal Protection Equipment Category. This can be shortened to CAT or PPE. Arcguard uses PPE.

Most importantly the category levels remain the same. The minimum arc rating for PPE is the same as HRC. The change is merely a name to more accurately describe the function of the categories.

NEW: PPE	FORMER: HRC	Minimum Arc Rating CAL/CM^2
1	1	4.0
2	2	8.0
3	3	25.0
4	4	40.0

All of our Arcguard garments exceed the 8.0 cal/cm^2 minimum requirement for PPE 2.

ASTM F1959/F1959M AND IEC 61482-1-1

Standard Test Method for Determining the Arc Rating of Materials for Clothing. This standard test method is used to measure the arc rating of materials intended for use as flame resistant clothing for workers exposed to arc flashes.

EXPLAINING ARC FLASH?

The arc flash is the resulting discharge of energy caused by an arcing fault. An arcing fault is the unintended flow of current through a medium not intended to carry the current. That just means that the electricity is flowing through something it shouldn't be; in most cases that result in injury, the medium was the air. The air becomes like a piece of copper conducting the electricity, only with the air you can see the massive discharge of the electrons from the discharging element. This is the arc flash (lightning on a smaller yet more deadly scale).

WHAT DOES CAL/CM^2 MEAN?

An Electric Arc Flash is normally expressed in cal/cm^2, or calories of heat energy per square centimetre. For example, the Arcguard 43317RBO Overall has a 12cal/cm^2 ATPV electrical arc flash rating. This means that 12 cal/cm^2 is the maximum incident energy resistance demonstrated by the 43317RBO fabric, prior to break-open or at the onset of a second degree skin burn. A typical electrical arc flash can release energy levels from 4cal/cm^2 to 30cal/cm^2 and exposures between 30cal/cm^2 and 60cal/cm^2 are not uncommon.

ARC FLASH CLOTHING SELECTION

First, consult the NFPA 70E compliance guide to determine which category of risk a particular activity belongs and the ATPV (Arc Thermal Performance Value) rating needed. Second, consult the high visibility standard AS/NZS 4602.1:2011 (TTMC-W17 standard if working on or near a road or highway) to determine what type of clothing you will need based on the environment you will be working in.

One thing to consider when evaluating the best protective workwear for you, is to aim to have no skin exposed. Ensure that the pant leg covers the top of the boot and the sleeves go to the hand, covering the wrists. High-voltage gloves are also necessary. And lastly, remember that the head is the most vulnerable part of the body. Don't forget to complete the arc flash protective clothing with suitable head gear of the same ATPV rating as the rest of the workwear.

ISO 14116

Protective clothing - Protection against flame - Limited flame spread materials, material assemblies and clothing. Garments certified to this standard protect workers from occasional and brief contact with small igniting flames, in circumstances where there is no heat hazard from flame or other source. The standard specifies limited flame spread properties in order to reduce the possibility of the clothing burning and thereby itself becoming the hazard.

ISO 11611:2015

Protective clothing for use in welding and allied processes. This standard specifies minimum safety requirements and test methods for protective clothing which is intended to protect the wearer against spatter (small splashes of molten metal), short contact time with flame, radiant heat from an electric arc used for welding and allied processes. It also minimizes the possibility of electrical shock by short-term, accidental contact with live electrical conductors in normal conditions of welding.

ISO 11612:2015

Protective clothing - Clothing to protect against heat and flame - Minimum performance requirements. These performance requirements are applicable to protective clothing where there is a need for clothing with limited flame spread properties and where the user can be exposed to radiant/ convective/contact heat or to molten metal splashes.

EN 1149:2008

Protective clothing. Electrostatic properties. Material performance and design requirements. The EN 1149 standard specifies a test method for materials to be used in the production of protective clothing with electrostatic dissipation for preventing incendiary discharge.

EN 1149-3:2008

Protective clothing. Electrostatic properties. Test methods for measurement of charge decay. The fabric releases its electrostatic charge to the air therefore won't conduct it to the user of the clothing. The standard contains a test method in which the amount of time it takes to dissipate electrostatic charge from the surface of the clothing material.

EN 1149-5:2008

Electrostatic properties. Performance requirements and material design. This is the European Standard for garments that protect against electrostatic discharge in areas where there is a risk of explosion and where there is a risk that the garments could create sparks (source of ignition), which in turn could ignite explosive materials.

CHANGE FROM HRC TO PPE

You may have noticed, in our communication and labelling, a change from HRC to PPE, on the Arcguard range. Most obvious is the change to the woven badge on Arcguard garments that denotes the Arc Rating and the corresponding category. This is because the standard that sets these categories has had an update. This standard is NFPA 70E.

HIGH RISK

HIGH RISK CATEGORIES

ARCGUARD BY BISON — ATPV (CAL) RATING — INHERENT FR / ANTISTATIC

INHERATEX (INHERENT)
240gsm Knit-10cal
240gsm-12cal
360gsm-16cal
Antistatic

363170N 243120N 243170NX 212170N 21217YN 213172RB0 170171NT 43317RB0

INHERALITE (INHERENT)
185gsm
8.8cal
Antistatic

213171ON 213170N 433173ON

INHERATEX (INHERENT)
400gsm
Sweatshirt
18.4cal
Antistatic

253170X 25217YN

INHERATEX (INHERENT)
300D
Poly Oxford
29cal
Antistatic

323170NX 32217YN 513170X 51217YN 140170T 14017NT 12017NT

TREATED FR ANTISTATIC COTTON BLEND

COTTON BLEND
88/11/1
11cal
Antistatic

21312RB0 170121NT 433121RB0 432121RB0

TREATED FR 100% COTTON

COTTON
325gsm
100% Cotton
13cal
(no Antistatic)

43212ON 43212YN 4311210N

TREATED FR COTTON NYLON

COTTON BLEND
88/12
11cal
(no Antistatic)

213122RB0X 17012RBT 43312RB0X

BISON STAMINA — LIMITED FLAME SPREAD — LIMITED FLAME SPREAD TREATMENT ANTISTATIC

STAMINA FR
LIMITED FLAME SPREAD INDEX 1
300D Poly Oxford
Minimum FR,
Antistatic

3231510 513150 140150BKT 120150T

HIGH RISK FABRICS

ARCGUARD INHERATEX FABRIC

Arcguard Inheratex is a blended Inherent FR fabric which offers uncompromising Flame Resistance, Arc Protection and Antistatic protection. Inheratex has inherent flame retardant properties which will not deteriorate or diminish; they are literally a structural part of the fibre. Inheratex fabric is soft, strong, and resilient, made from fibres that can be easily dyed, with good shape retention and quick drying. Inheratex is non-allergenic and has resistance to chemicals and solvents.

Benefits of Arcguard Inheratex Fabric Technology

- Inherent fibres do not deteriorate or lose performance, even after repeated laundering, dry cleaning, or spot-cleaning.
- Carbon antistatic threads are woven into the fabric and provide protection against the build-up of static electricity.
- Superior moisture management, quick dry technical fibres.
- A soft, strong, resilient finish that will stay looking good for longer and stay true to size.
- Arcguard Inheratex fibres provide uncompromised breathability and comfort, are non-allergenic and is resistant to most harsh chemicals and solvents.

Arcguard Inheratex fabrics and products come in different weights, construction, and cal rating, but all have the same type of protection at its core – a lifetime of FR protection.

Inheratex Fabrics

- Polo Knit: 240gsm 10Cal, PPE2
- Classic: 240gsm, 12Cal, PPE2
- Softshell: 360gsm, 16Cal, PPE2
- Sweatshirt: 400gsm, 18.4Cal, PPE2

Arcguard Inheratex fabric meets the following performance standards: ISO 11612:2015, ISO 11611, ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 61482, EN 1149-5:2018.

ARCGUARD INHERATEX RAINWEAR

STAY DRY FOR 6HRS IN OUR ARCGUARD RAINWEAR!

Arcguard Rainwear with 300D Poly Oxford, Antistatic carbon grid, Modacrylic liner and FR cotton lining has a 16,000+mm waterproof rating and comes with our 6hr Waterproof Guarantee.

Inheratex Rainwear Fabric

- Rainwear: 300D, 29Cal, PPE3

Arcguard Inheratex Rainwear fabric meets the following performance standards: ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

ARCGUARD INHERALITE™ FABRIC

The new Arcguard InheraLite™ range combines the best of the Arcguard Inheratex FR fabric that you already know and love, with high performing LENZING™ FR fabric to create a brand-new hybrid solution in High Risk protection. Joining these two technologies gives you the wearer the best of both worlds; lightweight, year round comfort and peace of mind knowing you will be protected should the worst happen.

Blended benefits of Arcguard InheraLite™

- Arc rating: 8.8 cal/cm² ATPV HRC2/PPE2.
- 185gsm LENZING™ FR Ripstop and Arcguard™ Modacrylic FR blended fibre.
- Inherent Fire Retardant, Antistatic and Arc protection guaranteed for the entire life of the garment.
- New lightweight and breathable design helps reduce the risk of heat stress and physiological strain on workers.
- LENZING™ FR has natural softness and comfort, enhanced breathability, and good moisture management.
- Ultra-Flect® Fire Retardant (FR) reflective tape as standard.

Benefits of LENZING™ FR Fabric Technology

LENZING™ FR is a sustainably produced inherently flame retardant and resistant fibre based on the renowned Modal fibres production process.

- Botanic origin: The cellulosic fibres are made through environmentally responsible processes from sustainably sourced natural raw materials. Wood pulp from the forest is transformed into biobased LENZING™ FR Modal fibres.
- Moisture management: Absorbs and releases moisture therefore better supporting thermal regulation.
- Enhanced Breathability: Allows thermoregulation and offers a significant reduction in wearer fatigue and helps to reduce risk of heat stress.
- Comfort: LENZING™ FR Modal fibres exhibit high flexibility, resulting in a naturally soft quality to the textile, enhancing wearer comfort.
- Better for the environment: Derived from nature, all LENZING™ FR standard Modal fibre types have been certified as compostable and biodegradable.
- Colour retention: LENZING™ FR fibres retain long-lasting colour vibrancy.

InheraLite™ Fabrics

- InheraLite™: 185gsm, 8.8Cal, PPE2

Arcguard InheraLite™ fabric meets the following performance standards: ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60, IEC 61482-1-1: 2019, EN 1149-5:2018.

HIGH RISK FABRICS CONTINUED

ARCGUARD COTTON BLEND FABRIC (Formerly called Natural Fibres)

The fire retardant cotton fibres are focused on the inside of the fabric, next to the wearers skin, to optimise comfort. The nylon is toward the face of the fabric, away from the skin, and increases the abrasion and strength of the fabric.

The Arcguard cotton blend range consists of two fabric compositions, both fabrics are treated with a THPC chemical for flame resistance. This treatment will last for the life of the garment, up to 50 washes, if washed according to the care instructions noted on the garment.

Cotton Blend Fabrics

- 88/11/1 composition: 240gsm, 11Cal, PPE2. FR cotton/nylon/carbon. The carbon antistatic thread is woven into the fabric to protect against static electricity.
- 88/12 composition: 240gsm, 11Cal, PPE2. 88% FR treated cotton, 12% nylon (no Antistatic).

Arcguard Cotton Blend fabric meets the following performance standards: ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 61482-1-2:2015 Class 1 (4KA), EN 1149-5:2018 (88/11/1 only).

ARCGUARD COTTON FABRIC (Formerly called Flameguard fabric)

In environments where the danger is flame spread Arcguard cotton should be your go to workwear. Fire retardant (FR) refers to a material's ability to self-extinguish once an ignition source is removed. Arcguard cotton fabric is treated with a THPC chemical that limits the flame spread on the fabric. This treatment 'puts the fire out' once a spark or flame has caused ignition.

Cotton Fabric

- 325gsm 100% FR treated cotton

Arcguard FR 100% Cotton fabric meets the following performance standards: ISO 11612:2015-A1, A2, B1, C1, E1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M.

STAMINA FR FABRIC (Formerly called Rigour Rainwear)

STAY DRY FOR 6HRS IN BISON STAMINA FR RAINWEAR!

Constructed with an FR treated 300D Oxford Polyester fabric and Carbon antistatic thread woven into the fabric. This fabric has a heavy-duty milky PU backing and all seams are sealed, for superior waterproofing. Suitable for antistatic protection and limited flame spread, this fabric is designed to give you the protection from the weather that you'll need as a worker in the utilities, oil, gas, petrochemical and steel industries. Bison Stamina FR has a 16,000mm waterproof rating and comes with our 6hr Waterproof Guarantee.

Stamina FR Fabric

- 300D FR treated polyester/carbon thread/PU backing

Stamina FR fabric meets the following performance standards: ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

PLEASE NOTE: All flame-resistant garments should be removed immediately and replaced with clean fire retardant apparel if they become fouled with flammable materials.

HIGH RISK FAQ'S

WHY HAS HRC CHANGED TO PPE?
The NFPA 70E (Standard for Electrical Safety in the Workplace) updated the designation HRC (Hazardous Risk Category) to PPE (Personal Protective Equipment) category. This is a change is name only, the minimum arc rating is still the same.

- HRC 1 now PPE1
- HRC2 now PPE2
- HRC3 now PPE3
- HRC4 now PPE4

WHAT DOES CAL STAND FOR?
Cal ratings refers to Calories/cm² (Cal/cm²). It is the unit of measure of the heat energy of an arc flash and the protective level of FR clothing. The bigger the cal number, the greater the protective level of the workwear.

DO GARMENTS HAVE TO DISPLAY A CAL RATING?
Yes, any Arc Rated garment is required to display the level of protection that they provide.

WHAT DOES ASTM 1959/F1959M AND IEC 61482-1-1 MEAN?
The standards ASTM 1959/F1959M, and IEC 61482-1-1 determine the arc rating (ELIM, ATPV and/or EBT) of textiles, clothing and PPE. ASTM 1959/F1959M and IEC 61482-1-1 test methods are effectively the same, with a minor difference in sample preparation. ASTM is an international standards organisation originating in America, and IEC is an international standard organisation originating in Geneva. Both standards are accepted and compliant in New Zealand and Australia.

INHERENT VS TREATED FABRIC FR?
Inherent fabrics such as our Arcguard Inheratex and InheraLite contain inherent FR fibres which mean they do not wash out - the FR properties are built into the fibre and are there for the life of the garment. Treated fabrics are chemically treated to provide FR properties and this means that these FR properties will wash out over time (typically 50 washes).

WHAT IS THE IMPORTANCE OF ANTISTATIC GARMENTS?
Antistatic garments protect wearers against electrostatic discharge (ESD). ESD is the accumulation and discharging of static electricity from one object to another such as the human body and an electronic device. Antistatic clothing typically has conductive threads or materials woven into them to safely dissipate or eliminate any static electricity.

ARC RATED VS FR CLOTHING?
All Arc Rated (AR) clothing is Flame Resistant (FR), but not all FR clothing is Arc rated.

FR clothing protects workers from fire-related hazards. Arc rated clothing protects workers from electrical hazards. Both hazards involve heat and flames. But arc flashes and electrical hazards are much more dangerous.

WHAT IS THE BEST WASHING ADVICE FOR HIGH RISK GARMENTS?
All of our products come with easy to read care labelling. Follow these care instructions for best results.

WHAT LAYERS OF CLOTHING DO I NEED TO CONSIDER?
If your job requires you to wear arc rated garments then you can put yourself at risk if you layer these garments with non arc rated products. Non FR synthetics are flammable and melt. They should NEVER be worn against the skin when an arc flash hazard is present.

For best protection wear arc rated garments underneath arc rated outer wear. At a minimum undergarments should be made out of non-melting natural fibres such as wool or cotton.

HOW DOES FR WORK?
The protective quality of FR fabric is that it is self extinguishing. Once the source of ignition is removed the fabric 'puts the fire out'. In the case of an Arc-Flash, Flash Fire or an Explosion, FR fabric offers the wearer extra seconds that can save a life.

WHY DOES MY FR GARMENT SINGE OR GET HOLES IN IT?
The garment will be damaged, have singe holes, but the wearer is protected from serious burns.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTY DO HIGH RISK GARMENTS HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

HIGH RISK STANDARDS MATRIX

	CODE	ARC RATED	FR	ANTI STATIC	INHERENT	TREATED	TTMC-W17 COMPLIANT	AS/NZS 4602.1:2011 DAY/NIGHT	AS/NZS 4602.1:2011 DAY ONLY	AS/NZS 1906.4:2010	ISO 14116	NFPA 70E PPE	ATPV RATING	EN ISO 11611	EN ISO 11612	EN1149-5	ASTM F1959/ 1959M-14 EN 61482-1-2
	363170N	✓	✓	✓	✓		●	●		●	●	PPE2	16CAL	●	●	●	●
	243120N	✓	✓	✓	✓		●	●		●	●	PPE2	10CAL		●	●	●
	243170NX	✓	✓	✓	✓		●	●		●	●	PPE2	10CAL		●	●	●
	212170N	✓	✓	✓	✓			●		●	●	PPE2	12CAL	●	●	●	●
	21217YN	✓	✓	✓	✓			●		●	●	PPE2	12CAL	●	●	●	●
	21312RBO	✓	✓	✓		✓	●	●		●	●	PPE2	11CAL		●	●	●
	213171ON	✓	✓	✓	✓		●	●		●	●	PPE2	8.8CAL		●	●	●
	213172RBO	✓	✓	✓	✓		●	●		●	●	PPE2	12CAL	●	●	●	●
	213170N	✓	✓	✓	✓		●	●		●	●	PPE2	8.8CAL		●	●	●
	213122RB0X	✓	✓			✓	●	●		●	●	PPE2	11CAL				●
	253170X	✓	✓	✓	✓		●	●		●	●	PPE2	18.4CAL		●	●	●
	25217YN	✓	✓	✓	✓			●		●	●	PPE2	18.4CAL		●	●	●
	170171NT	✓	✓	✓	✓						●	PPE2	12CAL	●	●	●	●
	17012RBT	✓	✓			✓					●	PPE2	11CAL				●
	170121NT	✓	✓	✓		✓					●	PPE2	11CAL		●	●	●
	43317RBO	✓	✓	✓	✓		●	●		●	●	PPE2	12CAL	●	●	●	●
	433173ON	✓	✓	✓	✓		●	●		●	●	PPE2	8.8CAL		●	●	●
	433121RBO	✓	✓	✓		✓	●	●		●	●	PPE2	11CAL		●	●	●
	43312RB0X	✓	✓			✓	●	●		●	●	PPE2	11CAL				●
	432120N	✓	✓			✓		●		●	●	PPE2	13CAL		●		●
	43212YN	✓	✓			✓		●		●	●	PPE2	8.6CAL		●		●
	432121RBO	✓	✓	✓		✓		●		●	●	PPE2	11CAL		●	●	●
	431121ON	✓	✓			✓			●	●	●	PPE2	13CAL		●		●
	323170NX	✓	✓	✓	✓		●	●		●	●	PPE3	29CAL	●	●	●	●
	32217YN	✓	✓	✓	✓			●		●	●	PPE3	29CAL	●	●	●	●
	513170X	✓	✓	✓	✓		●	●		●	●	PPE3	29CAL	●	●	●	●
	51217YN	✓	✓	✓	✓			●		●	●	PPE3	29CAL	●	●	●	●
	140170T	✓	✓	✓	✓					●	●	PPE3	29CAL	●	●	●	●
	14017NT	✓	✓	✓	✓					●	●	PPE3	29CAL	●	●	●	●
	12017NT	✓	✓	✓	✓						●	PPE3	29CAL	●	●	●	●
	323151O		✓	✓		✓	●	●		●	●					●	
	51315O		✓	✓		✓	●	●		●	●					●	
	140150BKT		✓	✓		✓				●	●					●	
	120150T		✓	✓		✓				●	●					●	

363170N JACKET ARCGUARD 16CAL TTMC-W17 SOFTSHELL INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. ISO 11612:2015. A1, B1, C1. ISO 11611 Class 2. ISO 14116 Index 3/5I/40. EN 1149-5:2018. IEC 61482 -1-1:2019.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 16Cal/cm² ATPV HRC2/PPE2
- Large front pockets, long tail design for extra coverage
- Ultra-Flect™ FR Segmented tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 360gsm Inherent Modacrylic blend inner and Poly outer
- **Colour:** Orange/Navy / **Sizes:** XS-4XL, 6XL, 8XL

16 CAL

EN 1149-5:2018 ISO 11612:2015 ISO 11611:2015

ADJUSTABLE SLEEVE CUFFS

PEN POCKET ON LEFT ARM

SEGMENTED FR REFLECTIVE TAPE

24312ON POLO ARCGUARD 10CAL TTMC-W17 INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1, E1, F1. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 10Cal/cm² ATPV HRC2/PPE2
- Mandarin collar with placket, zip pocket on left-hand side chest
- Ultra-Flect™ FR Segmented tape, long tail design for extra coverage

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Knit Inheratex: Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** XS-3XL, 5XL, 6XL, 8XL

10 CAL

EN 1149-5:2018 ISO 11612:2015

243170NX POLO ARCGUARD 10CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1, E1, F1. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 10Cal/cm² ATPV HRC2/PPE2
- Ribbed collar with placket, zip pocket on left-hand side chest
- Ultra-Flect™ FR Segmented tape, X-back tape for front-to-back differentiation, long tail design for extra coverage

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Knit Inheratex: Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** XS-3XL, 5XL, 6XL, 8XL

10 CAL

EN 1149-5:2018 ISO 11612:2015

2131710N SHIRT ARCGUARD 8.8CAL TTMC-W17 INHERALITE

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60. IEC 61482-1-1: 2019, EN 1149-5:2018. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Arc Rated / Inherent FR / Antistatic / 8.8Cal/cm² ATPV HRC2/PPE2
- Lightweight protection, button down front
- Chest pockets with button flaps, phone pocket on right-hand side
- Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 185gsm Ripstop Lenzing FR Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** S-6XL, 8XL

50+ 8.8 CAL

EN 1149-5:2018 ISO 11612:2015

213172RBO SHIRT ARCGUARD 12CAL TTMC-W17 INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, A2, B1, C1, E3, F1. ISO 11611 Class 1, A1+A2. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 12Cal/cm² ATPV HRC2/PPE2
- Button down front, chest pockets with button flaps
- Phone pocket on right-hand side, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Inheratex: Modacrylic blend
- **Colour:** Royal Blue/Orange / **Sizes:** S-6XL, 8XL

12 CAL

EN 1149-5:2018 ISO 11612:2015 ISO 11611:2015

21217 SHIRT ARCGUARD 12CAL DAY/NIGHT INHERATEX

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, A2, B1, C1, E3, F1. ISO 11611 Class 1, A1+A2. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 12Cal/cm² ATPV HRC2/PPE2, Ultra-Flect™ FR tape
- Chest pockets, phone pocket on right-hand side, vented back

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Inheratex: Modacrylic blend
- **Colour: Orange/Navy:** 21217ON in sizes XS-5XL, 6XL, 8XL
  Yellow/Navy: 21217YN in sizes S-4XL

12 CAL

EN 1149-5:2018 ISO 11612:2015 ISO 11611:2015

21312RBO SHIRT ARCGUARD 11CAL TTMC-W17 COTTON BLEND

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 1149-5:2018, EN 61482-1-2:2015 Class 1 (4KA).

- Arc Rated / FR / Antistatic
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2, Ultra-Flect™ FR tape
- Button down front, chest pockets with button flaps
- Phone pocket on right-hand side, vented back

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm FR Cotton/Polyamide/Carbon blend
- **Colour:** Royal Blue/Orange / **Sizes:** XS-6XL, 8XL

11 CAL

EN 1149-5:2018 ISO 11612:2015

213170N JACKET ARCGUARD 8.8CAL TTMC-W17 INHERALITE

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60. IEC 61482-1-1: 2019, EN 1149-5:2018. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Arc Rated / Inherent FR / Antistatic / 8.8Cal/cm² ATPV HRC2/PPE2
- Lightweight protection, non conductive vislon zip closure
- Chest pockets with velcro closure, velcro tabs at sleeve cuff
- Split side seam with velcro closure, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 185gsm Ripstop Lenzing FR Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** S-6XL, 8XL

50+ 8.8 CAL

EN 1149-5:2018 ISO 11612:2015

213122RBOX JACKET ARCGUARD 11CAL TTMC-W17 X-BACK COTTON BLEND

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ASTM F1959/F1959M. Fire Retardant, Arc Protection. ISO 14116 Index 3/5I/75.

- Arc Rated / FR
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2
- Chest pockets with velcro closure, adjustable velcro tabs at sleeve cuff
- Non conductive vislon zip closure with placket to protect zip
- Reflective FR X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Cotton/Polyamide blend
- **Colour:** Royal Blue/Orange / **Sizes:** S-6XL, 8XL

11 CAL

253170X HOODED SWEATSHIRT ARCGUARD 18.4CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). Design certified to: AS/NZS 4602.1:2011+ Amdt 2:2020 Class DN. 1906.4.2010 Class NF, IEC 61482-1-1:2009, ISO 11612:2015 Class A1 B1 C2, ISO 14116 Index 3/5H/40. EN1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 18.4Cal/cm² ATPV HRC2/PPE2
- Quarter-zip at centre front, zipped waist pockets
- Ultra-Flect™ FR Segmented X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 400gsm Modacrylic blend - single side brushed fleece
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

18.4 CAL

EN 1149-5:2018 ISO 11612:2015

170171NT TROUSER ARCGUARD 12CAL INHERATEX TAPED

Standards: ISO 11612:2015. A1, A2, B1, C1, E3, F1. ISO 11611 CLASS 1, A1 + A2. ISO 14116 INDEX 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 12Cal/cm² ATPV HRC2/PPE2
- Elasticated waist with fly front
- Double layer knee with knee-pad pockets
- Cargo pockets on both legs, tool pocket on right leg
- Back pockets with velcro closure, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Inheratex: Modacrylic blend
- **Colour:** Navy / **Sizes:** 72-132

12 CAL

EN 1149-5:2018 ISO 11612:2015 ISO 11611:2015

25217YN HOODED SWEATSHIRT ARCGUARD 18.4CAL DAY/NIGHT INHERATEX

Standards: Design certified to: AS/NZS 4602.1:2011+ Amdt 2:2020 Class DN. 1906.4.2010 Class NF, IEC 61482-1-1:2009, ISO 11612:2015 Class A1 B1 C2, ISO 14116 Index 3/5H/40. EN1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 18.4Cal/cm² ATPV HRC2/PPE2
- Quarter-zip at centre front
- Zipped waist pockets
- Ultra-Flect™ FR Segmented tape for better movement

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 400gsm Modacrylic blend - single side brushed fleece
- **Colour:** Yellow/Navy / **Sizes:** XS-4XL, 6XL, 8XL

18.4 CAL

EN 1149-5:2018 ISO 11612:2015

17012RBT TROUSER ARCGUARD 11CAL COTTON BLEND TAPED

Standards: ASTM F1959/F1959M. Fire Retardant, Arc Protection. ISO 14116 Index 3/5H/60.

- Arc Rated / FR
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2
- Elasticated waist
- Cargo pockets with velcro closure
- Reflective FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Cotton/Polyamide blend
- **Colour:** Royal Blue / **Sizes:** 72-132

11 CAL

170121NT TROUSER ARCGUARD 11CAL COTTON BLEND TAPED

Standards: ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 1149-5:2018, EN 61482-1-2:2015 Class 1 (4KA).

- Arc Rated / FR / Antistatic
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2
- Elasticated waist with button and fly front, twin back pockets on back
- Cargo pockets on both legs, ruler pocket on right side
- Ultra-Flect™ FR tape above knee

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm FR Cotton/Polyamide/Carbon blend
- **Colour:** Navy / **Sizes:** 72-132

11 CAL

EN 1149-5:2018 ISO 11612:2015

43317RB0 OVERALL ARCGUARD 12CAL TTMC-W17 INHERATEX ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, A2, B1, C1, E3, F1. ISO 11611 Class 1, A1+A2. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic / 12Cal/cm² ATPV HRC2/PPE2
- Back pocket, tool, cargo and radio pockets, gusset at lower leg
- YKK non-conductive two-way zip, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Inherent-FR Modacrylic blend
- **Colour:** Royal Blue/Orange / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

4331730N OVERALL ARCGUARD 8.8CAL TTMC-W17 INHERALITE ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + Amdt 2:2020 Class DN. AS/NZS 1906.4.2010. ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60. IEC 61482-1-1: 2019, EN 1149-5:2018. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Arc Rated / Inherent FR / Antistatic / 8.8Cal/cm² ATPV HRC2/PPE2
- Lightweight protection, YKK front zip, velcro tabs at sleeve cuff
- Back pocket/tool pocket on right, cargo pocket on left, zips at hem
- Chest pockets, comm's loops at chest, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 185gsm Ripstop Lenzing FR Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R, 142R

433121RBO OVERALL ARCGUARD 11CAL TTMC-W17 COTTON BLEND ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 1149-5:2018, EN 61482-1-2:2015 Class 1 (4KA).

- Arc Rated / FR / Antistatic / 11Cal/cm² ATPV HRC2/PPE2
- Back pocket/tool pocket on right, cargo pocket on left, radio pocket
- YKK non-conductive two-way zip, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm FR Cotton/Polyamide/Carbon blend
- **Colour:** Royal Blue/Orange / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

11 CAL

EN 1149-5:2018 ISO 11612:2015

43212ON OVERALL ARCGUARD 13CAL DAY/NIGHT COTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, E1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M.

- Arc Rated / FR / 13Cal/cm² ATPV HRC2/PPE2
- Back pocket on right, cargo pockets on legs, Ultra-Flect™ FR tape
- YKK non-conductive two-way zip, velcro tabs at sleeve cuffs
- Chest pockets with velcro closure, internal phone/radio pocket

- **Industries:** Infrastructure & Roading, Mining, Manufacturing, Utilities
- **Fabric:** 325gsm Treated FR 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

13 CAL

ISO 11612:2015

43212YN OVERALL ARCGUARD 8.6CAL DAY/NIGHT COTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, E1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M.

- Arc Rated / FR / 8.6Cal/cm² ATPV HRC2/PPE2
- Back pocket on right, cargo pockets on legs, Ultra-Flect™ FR tape
- YKK non-conductive two-way zip, velcro tabs at sleeve cuffs
- Chest pockets with velcro closure, internal phone/radio pocket

- **Industries:** Infrastructure & Roading, Mining, Manufacturing, Utilities
- **Fabric:** 325gsm Treated FR 100% Cotton
- **Colour:** Yellow/Navy / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

8.6 CAL

ISO 11612:2015

43312RBOX OVERALL ARCGUARD 11CAL TTMC-W17 X-BACK COTTON BLEND ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ASTM F1959/F1959M. Fire Retardant, Arc Protection. ISO 14116 Index 3/5I/75.

- Arc Rated / FR
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2
- Vislon zip, chest pocket on right, twin cargo pockets on leg
- Reflective FR X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Cotton/Polyamide blend
- **Colour:** Royal Blue/Orange / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

11 CAL

432121RBO OVERALL ARCGUARD 11CAL DAY/NIGHT COTTON BLEND ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 1149-5:2018, EN 61482-1-2:2015 Class 1 (4KA).

- Arc Rated / FR / Antistatic / 11Cal/cm² ATPV HRC2/PPE2
- Back pocket/tool pocket on right, cargo pocket on left leg
- YKK non-conductive two-way zip, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm FR Cotton/Polyamide/Carbon blend
- **Colour:** Royal Blue/Orange / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

11 CAL

EN 1149-5:2018 ISO 11612:2015

431121ON OVERALL ARCGUARD 13CAL DAY ONLY COTTON ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, E1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M.

- Arc Rated / FR / 13Cal/cm² ATPV HRC2/PPE2
- YKK non-conductive two-way zip
- Back pocket/tool pocket on right hand, internal phone/radio pocket
- Chest pockets and all pockets, including side, fastened with velcro

- **Industries:** Infrastructure & Roading, Mining, Manufacturing, Utilities
- **Fabric:** 325gsm Treated FR 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

13 CAL

ISO 11612:2015

HIGH RISK
RAINWEAR

WATERPROOF 6HR GUARANTEE

COMBINE WITH 513170X

323170NX JACKET ARCGUARD 29CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011+ AMDT 2:2020 Class DN. 1906.4.2010 Class F. ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- 2-way YKK zip front, storm cuffs, tuck away or removable hood
- Ultra-Flect™ FR Segmented X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Orange/Navy / **Sizes:** XS-4XL, 6XL, 8XL

29 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

INTERNAL ZIP TO ATTACH ARCGUARD VEST

VELCRO ADJUSTABLE SLEEVES, STORM CUFFS

SEGMENTED FR RETRO-REFLECTIVE X-BACK TAPE

WATERPROOF 6HR GUARANTEE

ZIPS INSIDE 32317ONX

513170X VEST ARCGUARD 29CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011+ AMDT 2:2020 Class DN. 1906.4.2010 Class F. ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- FR cotton fleece liner, dual entry front pockets, comm's loop
- Ultra-Flect™ FR Segmented X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

29 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

WATERPROOF 6HR GUARANTEE

ZIPS INSIDE 32217YN

51217YN VEST ARCGUARD 29CAL DAY/NIGHT INHERATEX

Standards: AS/NZS 4602.1:2011+ AMDT 2:2020 Class DN. 1906.4.2010 Class F. ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- FR cotton fleece liner, dual entry front pockets, comm's loop
- Ultra-Flect™ FR Segmented tape, radio and pen pocket

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Yellow/Navy / **Sizes:** XS-4XL, 6XL, 8XL

29 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

WATERPROOF 6HR GUARANTEE

COMBINE WITH 51217YN

32217YN JACKET ARCGUARD 29CAL DAY/NIGHT INHERATEX

Standards: AS/NZS 4602.1:2011+ AMDT 2:2020 Class DN. 1906.4.2010 Class F. ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- 2-way YKK zip at front, waterproof zipped pockets with storm cover
- Removable/tuck away hood, Ultra-Flect™ FR Segmented tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Yellow/Navy / **Sizes:** XS-4XL, 6XL, 8XL

29 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

WATERPROOF 6HR GUARANTEE

14017 OVERTROUSER ARCGUARD 29CAL INHERATEX

Standards: AS/NZS 1906.4.2010 Class F (14017OT only). ISO 11612:2015 Class A1 B1 C1 F1.ISO 11611:2015 Class 1. A1, ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- Elasticated waist with internal drawstring, FR cotton lining
- Zipped leg gusset with velcro tabs, nylon domes at hem
- Ultra-Flect™ FR Segmented tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** 14017OT (Orange), 14017NT (Navy) / **Sizes:** XS-4XL, 6XL, 8XL

29 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

WATERPROOF 6HR GUARANTEE

12017NT BIB TROUSER ARCGUARD 29CAL INHERATEX

Standards: ISO 11612:2015 Class A1 B1 C1 F1.ISO 11611:2015 Class 1. A1, ISO 14116 Index 3/5H/40. ASTM F1959/F1959M-14E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

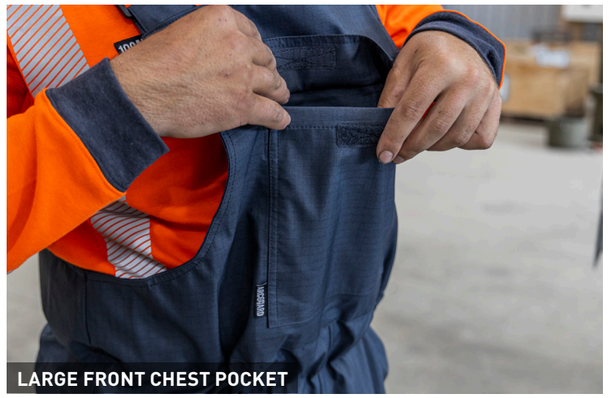
- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- Covered elastic shoulder straps, large front chest pocket
- Elasticated waist at back, FR cotton lining
- Ultra-Flect™ FR Segmented tape, zipped leg gusset with velcro tabs

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Navy / **Sizes:** XS-4XL, 6XL, 8XL

29 CAL

EN 1149-5:2018 ISO 11612:2015 ISO 11611:2015

ADJUSTABLE ELASTIC SHOULDER STRAPS


LARGE FRONT CHEST POCKET

ZIPPED GUSSET WITH VELCRO

WATERPROOF 6HR GUARANTEE

COMBINE WITH 513150

3231510 JACKET STAMINA FR & ANTISTATIC TTMC-W17 FLEECE LINED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. Water Resistance H20:16,000mm. Breathability: 4,000g/m2/24hr. AS/NZS 1906.4.2010 Class F, ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

- Antistatic and FR - Index1
- 6hr Waterproof Guarantee (16,000mm waterproof rating)
- Removeable fleece lining, removeable/tuck away hood
- Internal radio pocket and mobile phone pocket, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford, Antistatic carbon grid, with PU backing
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

EN 1149-5:2018

WATERPROOF 6HR GUARANTEE

ZIPS INSIDE 3231510

513150 VEST STAMINA FR & ANTISTATIC TTMC-W17 FLEECE LINED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. Water Resistance H20:16,000mm. Breathability: 4,000g/m2/24hr. AS/NZS 1906.4.2010 Class F, ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

- Antistatic and FR - Index1
- 6hr Waterproof Guarantee (16,000mm waterproof rating)
- Chest pocket on left side, comm's loop on right side
- Fleece lined side pockets, large front pockets, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford, Antistatic carbon grid, with PU backing
- **Colour:** Orange / **Sizes:** S-4XL, 6XL

EN 1149-5:2018

WATERPROOF 6HR GUARANTEE

140150BKT TROUSER STAMINA FR & ANTISTATIC

Standards: AS/NZS 1906.4.2010 Class F. Water Resistance H20:16,000mm. Breathability: 4,000g/m2/24hr. ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

- Antistatic and FR - Index1
- 6hr Waterproof Guarantee (16,000mm waterproof rating)
- Waterproof zips on fly and pockets, elasticated waist with fly front
- Rear pockets with storm flap closure, YKK zipped gussets at ankle
- Double band of Ultra-Flect™ FR tape on legs

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford, Antistatic carbon grid, with PU backing
- **Colour:** Orange/Black / **Sizes:** S-4XL, 6XL

EN 1149-5:2018

WATERPROOF 6HR GUARANTEE

120150T BIB TROUSER STAMINA FR & ANTISTATIC

Standards: AS/NZS 1906.4.2010 Class F. Water Resistance H20:16,000mm. Breathability: 4,000g/m2/24hr. ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

- Antistatic and FR - Index1
- 6hr Waterproof Guarantee (16,000mm waterproof rating)
- Zipped gusset at lower leg, elastic adjustable shoulder straps
- Front chest pocket with flap and velcro closure
- Double band of Ultra-Flect™ FR tape on legs

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford, Antistatic carbon grid, with PU backing
- **Colour:** Orange / **Sizes:** S-4XL, 6XL

EN 1149-5:2018

FOOD INDUSTRY

OVERALLS / JERKINS / TROUSERS
DUSTCOATS / GUMBOOTS

A hygienic environment is crucial to food safety. We have the perfect product range as a solution to minimise any contamination when workers go about their daily work duties.

BISON WORKZONE

FOOD INDUSTRY

FOOD INDUSTRY QUICK REFERENCE

OVERALLS
PG 124-125

460014W

460015W

4300132WO

430013W

430015W

JERKINS
PG 125-126

280014W

280016W

280011W

280013W

TROUSERS
PG 126

17001W

DUSTCOATS
PG 127

380012WO

380012WY

380013W

GUMBOOTS
PG 127

MOHAWKWGY

MOHAWKWY

FOOD INDUSTRY STANDARDS EXPLAINED

IS3/IAS3 NZ FOOD INDUSTRY GUIDELINES

All our food industry garments meet the IS3/IAS3 NZ Food Industry Guidelines.

The IS3/IAS3 guideline lays down the requirements for the establishment and the maintenance of a hygienic production environment in premises licensed under the Meat Act 1981 or approved by NZFSA (New Zealand Food Safety Authority).

IS3/IAS3 addresses sanitation and hygiene and part of this requirement is Protective clothing. Protective clothing are garments worn as outer wear while any person is present in a food area and includes, but is not restricted to, overalls, aprons, protective sleeves, leggings, gloves, hair coverings and footwear.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

FOOD INDUSTRY FAQ'S

WHAT DO YOUR FOOD INDUSTRY GARMENTS OFFER?
Our Food Industry garments come in polycotton which is a blend of synthetic polyester and natural cotton. The benefit of polycotton is the balance between the durability of polyester and breathability of cotton.

We have two available polycotton weights; lightweight 190gsm and midweight 240gsm.

We also cater for one piece or two piece workwear options with overalls as one option and trousers with either a jerkin or dustcoat as another.

WHAT IS YOUR SMARTZONE FOOD INDUSTRY FOOTWEAR AND CLOTHING SYSTEM?
The Smartzone system is a colour coded range of clothing and footwear that helps prevent cross contamination. This is the perfect solution to the following challenges:

- Eliminates risk of cross contamination
- Instant recognition from great distances
- Segregation of zones for hygiene
- Packaged goods versus goods in process
- Prevents transition of PPE between different zones.

To find out more about Smartzone clothing and footwear talk to your Territory Manager today.

WHAT IS THE BEST WASHING ADVICE FOR FOOD INDUSTRY GARMENTS?
All of our products come with easy to read care labelling. Follow these care instructions for best results.

WHAT SIZES DO YOUR FOOD INDUSTRY GARMENTS COME IN?
We cater for most sizes with our Overalls and Dustcoats coming in sizes 72R (size 3) up to 142R (18) and our Jerkins and Trousers in sizes XS up to 8XL.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTIES DOES FOOD INDUSTRY GARMENTS HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

460014W OVERALL WORKZONE LIGHTWEIGHT POLYCOTTON FOOD INDUSTRY ZIP

- YKK nylon coil zip front
- Internal chest pocket on right hand side
- Side pant pockets
- Covered side access pockets
- Elasticated back waist
- Short sleeve

- **Industries:** Food Industry
- **Fabric:** 190gsm Polycotton
- **Colour:** White / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

460015W OVERALL WORKZONE POLYCOTTON FOOD INDUSTRY ZIP

- YKK nylon coil zip front
- Internal chest pocket on right hand side
- Side pant pockets
- Covered access pockets
- Elasticated back waist
- Short sleeve

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

430015W OVERALL WORKZONE POLYCOTTON FOOD INDUSTRY ZIP

- YKK nylon coil zip front
- Internal chest pocket on right hand side
- Side pant pockets
- Covered side access pockets
- Elasticated back waist
- Ribbed cuffs

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R, 142R

4300132WO OVERALL WORKZONE LIGHTWEIGHT POLYCOTTON HI-VIS FOOD INDUSTRY ZIP

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F.

- YKK nylon coil zip front
- Internal chest pocket on right hand side
- Covered side access pockets
- Elasticated back waist
- Ribbed cuffs

- **Industries:** Food Industry
- **Fabric:** 190gsm Polycotton
- **Colour:** White/Orange / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

430013W OVERALL WORKZONE LIGHTWEIGHT POLYCOTTON FOOD INDUSTRY ZIP

- YKK nylon coil zip front
- Internal chest pocket on right hand side
- Side pant pockets
- Covered side access pockets
- Elasticated back waist

- **Industries:** Food Industry
- **Fabric:** 190gsm Polycotton
- **Colour:** White / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R, 142R

280014W JERKIN WORKZONE LIGHTWEIGHT POLYCOTTON FOOD INDUSTRY ZIP

- YKK nylon coil zip front
- Short sleeve

- **Industries:** Food Industry
- **Fabric:** 190gsm Polycotton
- **Colour:** White / **Sizes:** XS-4XL, 6XL, 8XL

280016W JERKIN WORKZONE POLYCOTTON FOOD INDUSTRY DOMED

- Covered metal dome front and extended opening for comfort and easy on off
- Side splits to allow for unisex fit
- Short sleeve

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** XS-4XL, 6XL, 8XL

280011W JERKIN WORKZONE POLYCOTTON FOOD INDUSTRY DOMED

- Covered metal dome front and extended opening for comfort and easy on off
- Side splits to allow for unisex fit
- Long sleeve

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** XS-4XL, 6XL, 8XL

280013W JERKIN WORKZONE POLYCOTTON FOOD INDUSTRY ZIP

- YKK nylon coil zip front
- Rib sleeve cuffs

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** XS-4XL, 6XL

17001W TROUSERS POLYCOTTON FOOD INDUSTRY

- Elastic waist with drawstring
- Internal fob pocket at front waist
- Side pockets

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** XS-6XL, 8XL

380012 DUSTCOAT WORKZONE LIGHTWEIGHT POLYCOTTON HI-VIS FOOD INDUSTRY DOME

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D.
AS/NZS 1906.4:2010 Class F.

- Covered metal dome front
- Internal chest pocket on right side and side pockets
- Ribbed cuffs
- Split vent at back hem

- **Industries:** Food Industry
- **Fabric:** 190gsm Polycotton
- **Colour:** 380012WO (White/Orange), 380012WY (White/Yellow)
  Sizes: 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R (142R - 380012WO only)

380013W DUSTCOAT WORKZONE POLYCOTTON FOOD INDUSTRY DOME

- Covered metal dome front
- Internal chest pocket on right side
- Side pockets
- Split vent at back hem

- **Industries:** Food Industry
- **Fabric:** 240gsm Polycotton
- **Colour:** White / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

MOHAWK GUMBOOT MOHAWK PVC/NITRILE FOOD INDUSTRY

Standards: Approved to AS 2210.3:2019 and EN ISO 20345:2011 SB, SRC.

- Sole resistant to solvents, oil, acid, alkalis and fats
- Steel toe cap, reinforced ankle, heel and instep for optimum support
- Superior slip resistant sole with cleat pattern designed for traction
- Cut off rings for personalised fit

- **Industries:** Manufacturing, Food Industry
- **Material:** PVC/Nitrile
- **Colour:** MOHAWKWGY (White/Grey), MOHAWKWY (White/Yellow)
  Sizes: 4-14 & 16

WOMEN'S

POLOS / TROUSERS / SHORTS / RAINWEAR

Our women's range of workwear has been designed by NZ Women for the NZ working environment. Our Product Development team have taken into consideration the female shape, how garments need to move and function day-to-day while keeping you protected and comfortable on the job.

BISON

WOMEN'S

WOMEN'S QUICK REFERENCE

POLOS
PG 134-135

W23101ON

W23101YN

W23201ON

W23201YN

W24301OX

TROUSERS
PG 136

W17001N

W170015NT

SHORTS
PG 137

W19001N

RAINWEAR
PG 138-139

W313050N

"I LOVE Bison's womens work trousers, and these (shorts) are literally the same but shorts. Super comfy, high waist, stretchy and lots of pockets. Perfect mid-thigh length that I love. They are so comfortable and perfect as I regularly wear them under overalls but like to be able to work in them if I don't. Highly, highly recommend."

Kate - Diesel Mechanic
@diesel.kate

The Bison shorts are really great. The velcro straps are the game changer for me especially with button up shirts. They help when they've been worn a couple days and are slightly loose or when you're on your period and slightly bloated so can release them. Love where they sit on my hips and the length is really great.

Fabric is nice and stretchy too so that helps with a lot of comfortable movement and bending down a lot. I use all the pockets and that loop on the left side of my thigh holds my hammer in it and IT'S GOOD! 12/10.

Tegan - Qualified painter decorator
@tradiegal

Neave Osborne @mrs.builder_

BISON STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

The Waka Kotahi (NZTA) CoPTTM specifies two main colours with regards to use on New Zealand roads;

- Yellow: Garments for site traffic management supervisors - STMS; and
- Orange: Garments for all wearers other than supervisors.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (eg 100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabrics technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment.
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

AS/NZS 4399:2017 - SUN PROTECTIVE CLOTHING

Products have been tested to the Australian/New Zealand standard for sun protective clothing AS/NZS 4399:2017 (Ultraviolet Protection Factor).

EN 343 PROTECTIVE CLOTHING - PROTECTION AGAINST RAIN

EN 343 is a European Standard for protective clothing that outlines a minimum level of protection against wet weather, and is tested for its ability to withstand heavy water pressure and for its breathability.

WOMEN'S FAQ'S

CAN I STILL LOOK LIKE PART OF THE TEAM WITHOUT WEARING MEN'S WORKWEAR?
In Bison Women's Workwear - yes you can! We stock the same products but designed to fit women. This is especially useful for uniform purposes – the whole team can look the same but have a personal fit.

I'M ONLY OFFERED MEN'S WORKWEAR IN MY WORKPLACE?
Ladies, for your comfort and safety it's time to start asking for women's workwear in your workplace. Workwear designed for men generally does not fit women in the same way which can increase health and safety risks for women. Female workers should have access to protective clothing designed specifically for women's bodies.

WHAT IS A WICKING PANEL ON YOUR POLOS?
Our polos have Moisture Wicking panels that push sweat and moisture to the outer surface of the fabric, which enables rapid drying. The wicking properties rely on 'capillary action' which in textiles is the movement of a liquid through tiny spaces within a fabric. Wicking polyester will always keep the wearer comfortable.

WHAT IS THE BENEFIT OF THE COTTON BACK POLOS?
You get the best of both worlds with a cotton backed fabric! The comfort, breathability, and odour control of cotton against your skin, and the moisture wicking, and fluorescent qualities of polyester on the outside.

WHAT IS UPF CLOTHING?
The UPF (Ultraviolet Protection Factor) is a numerical rating given to clothing to indicate how effectively the fabric blocks ultraviolet (UV) radiation. A UPF rating of 30 and over is classed as a 'Very Good' protection blocking about 96.0 – 97.4% of UV radiation. A UPF rating of 50 and over is classed as 'Excellent' protection blocking about 97.5% or more of UV radiation. Darker colours generally offer a greater protection against UV radiation.

WHY X-BACK TAPE DESIGN OVER H-BACK DESIGN?
The X-back design was brought in to help differentiate the front to back of a worker who may be working at night or in low light. Standard H-back designs are the same at the front and back. Utilising the X-back design means you can easily distinguish whether a wearer is facing you or has their back to you.

WHAT IS THE 12HR WATERPROOF GUARANTEE ON THE EXTREME JACKET?
Our Bison Extreme 450D fabric has a 30,000+mm waterproof rating, a breathability rating of 4,000g/m^2/24hr and comes with our 12hr Waterproof Guarantee. This means that it's going to take 30 metres of water pressure before the Extreme fabric lets water through! That's one serious downpour!

WHAT ARE WATERPROOF RATINGS?
For any fabric to be considered waterproof it must be able to withstand the pressure of a column of water 'standing' on the fabric without leaking. This is tested in a laboratory using the hydrostatic head or water column test method. The test is done using water column pressure, equal to the height of a column of water, a fabric can hold before water starts to seep through it. A water column of 1 meter is equal to 1000mm of pressure. Our women's Extreme jacket is a 450D Stratatek™ fabric which has a waterproof rating of 30,000+mm.

DOES TAPE EFFECT THE WATERPROOF OF RAINWEAR?
Because all our rainwear is seam sealed, on styles where the reflective tape is stitched, all stitch lines are sealed. Our Bison Extreme Rainwear uses heat applied Ultra-Flect™ tape that doesn't require stitching.

WHAT DOES THE 'D' MEAN ON THE FABRIC?
The 'D' in Bison Extreme stands for Denier. Denier is basically the thickness of the yarn/thread that makes a fabric. Just having a thicker thread doesn't always mean a tougher fabric.

Our 450D Extreme Rainwear is our toughest, most waterproof and most durable rainwear in our range it also has the best comfort to protection ratio. The 450D has the best warp and weft tear strength with incredibly high abrasion - you'll never wear through the fabric of this rainwear.

WHAT ARE STORM CUFFS?
Storm cuffs are a tight fitting inner cuff which prevents rain or wind from getting inside a jacket.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTY DOES APPAREL HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

WOMEN'S

W23201 POLO WOMEN'S DAY/NIGHT QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Ultra-Flect™ multi-directional segmented tape
- Zip pocket in side panel away from chest, longer back hem
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** W23201ON (Orange/Navy), W23201YN (Yellow/Navy)
  Sizes: 8, 10, 12, 14, 16, 18, 24

W23101 POLO WOMEN'S DAY ONLY QUICK-DRY COTTON BACKED

Standards: AS/NZS 4602.1:2011 + AMDT 2:2020 Class D. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Zip pocket in side panel away from chest, longer back hem
- Wicking panels for comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** W23101ON (Orange/Navy), W23101YN (Yellow/Navy)
  Sizes: 8, 10, 12, 14, 16, 18, 20, 24

W24301OX POLO WOMEN'S TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking mesh panels for superior comfort and ventilation
- Ultra-Flect™ segmented X-back tape for front-to-back differentiation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24, 26

W17001N TROUSER WOMEN'S LIGHTWEIGHT STRETCH POLYCOTTON

- Canvas weave fabric for toughness and elastane for stretch
- Heavy duty Endura reinforcing panels
- High waist for comfort and coverage, flat elastic waistband at back
- In-leg gusset to reduce friction and wear at seam
- Full suite of cargo pockets on both sides, flat hip pockets at the back
- Double layer reinforced knee

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24

ENDURA TOUGH CRUTCH

W170015NT TROUSER WOMEN'S LIGHTWEIGHT STRETCH POLYCOTTON TAPED

- Canvas weave fabric for toughness and elastane for stretch
- Heavy duty Endura reinforcing panels
- High waist for comfort and coverage, flat elastic waistband at back
- In-leg gusset to reduce friction and wear at seam
- Full suite of cargo pockets on both sides,flat hip pockets at the back
- Ultra-Flect™ segmented tape at lower leg

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24

ENDURA TOUGH CRUTCH

W19001N SHORT WOMEN'S LIGHTWEIGHT STRETCH POLYCOTTON

- Canvas weave fabric for toughness and elastane for stretch
- Mid to high waist for comfort and coverage
- Flat elastic waistband at back, mid-thigh length
- Elastic adjuster tabs at waist
- Tough Crutch in-leg gusset to reduce friction and wear at seam
- Full suite of cargo pockets on both sides, flat hip pockets at the back

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing, Warehousing, Transport & Logistics
- **Fabric:** 190gsm Polycotton with 2% Elastane
- **Colour:** Navy / **Sizes:** 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

ENDURA TOUGH CRUTCH

W31305ON JACKET EXTREME WOMEN'S TTMC-W17

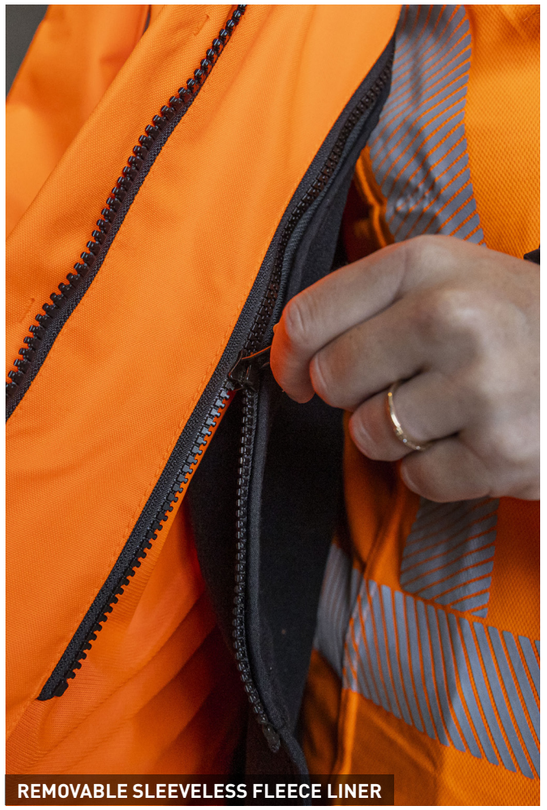
Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, removable fleece liner, removable hood
- 450D 3-layer Stratatek fabric has best tear strength, phenomenal abrasion resistance, and high flexibility, neoprene storm cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Orange/Navy / **Sizes:** 8, 10, 12 , 14, 16, 18, 20, 22

VISION ADJUSTER DESIGNED TO WORK WITH HARD HATS

NEOPRENE STORM CUFFS AND VELCRO ADJUSTOR


REMOVABLE SLEEVELESS FLEECE LINER

TTMC-W17

APPAREL / OVERALLS / RAINWEAR
HIGH RISK

We have a range of high quality, innovative TTMC-W17 workwear available in our Bison and Arcguard brands. All of our products meet the latest TTMC-W17 standard for the safe and efficient management and operation of Temporary Traffic Management (TTM) on all roads in New Zealand.

BISON

BISON WORKZONE

BISON EXTREME

BISON STAMINA

ARCGUARD BY BISON

TTMC-W17

TTMC-W17 QUICK REFERENCE

APPAREL
PG 148-153

2330510

233020

233010X

2430520

243020

243020X

243010

W243010X

213020

522051STMSY

523050

523050X

533050

533050X

393050N

363050

OVERALLS
PG 154-155

4330230N

4330220N

43302ONX

RAINWEAR
PG 156-159

3130520N

3130510X

W313050N

323050

323050X

343050

323000N

513050

513050X

HIGH RISK
PG 160-167

363170N

243120N

243170NX

21312RB0

2131710N

213172RB0

213170N

213122RB0X

253170X

43317RB0

4331730N

433121RB0

43312RB0X

323170NX

513170X

3231510

513150

WOMEN'S
PG 168-169

W243010X

W313050N

TTMC-W17 STANDARDS EXPLAINED

CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM) - TTMC-W17

CoPTTM describes best practice for the safe and efficient management and operation of temporary traffic management (TTM) on all roads in New Zealand.

The Waka Kotahi (NZTA) CoPTTM specifies two main colours with regards to use on New Zealand roads;

- Yellow: Garments for site traffic management supervisors - STMS; and
- Orange: Garments for all wearers other than supervisors.

STAYING COMPLIANT IN TTMC-W17 GARMENTS

- TTMC-W17 garments must not display any lettering/ symbols/logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area permitted is 7500mm^2 (eg 100mm x 75mm).
- Garment designs that include a clear plastic pocket or similar must locate this pocket within the described maximum 7500mm^2.
- Where required for related safety reasons a fabrics technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment.
- A manufacturer's label to a maximum size of 50mm x 20mm may be sewn or printed on non-compliant material on the lower sleeve or leg.
- Any buttons, domes or similar closure devices that are placed on compliant material must match the colour of the garments.

STMS GARMENTS

- The STMS sleeveless vest enables the person responsible at a worksite to be readily identified.
- The background material colour must be fluorescent yellow.
- STMS garments are limited to the STMS logo located on the upper front left side of the garment and as specified on the back of the garment and the technical recognition I.D. as appropriate. Other logos or labels may not be added.

AS/NZS 4602.1:2011 - HIGH VISIBILITY SAFETY GARMENTS STANDARD

AS/NZS 4602.1:2011 is a joint Australian and New Zealand standard covering high visibility safety garments.
The standard specifies visual requirements of hi-vis safety garments, and refers to AS/NZS 1906.4:2010 for fabric and tape used in the products.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS DN

Class DN are garments designed for day and/or night time use. These garments are the most common and are a combination of compliant background material and retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS D

Class D are garments designed for daytime use only. These garments have compliant background material, but no retro-reflective tape.

AS/NZS 4602.1:2011 + AMDT 2:2020 CLASS N

Class N are garments designed for night time use only. Class N has no fluorescent fabric but does have retro-reflective tape. Class N provides the wearer with high visibility at night when viewed under retro-reflected light such as vehicle headlights.

AS/NZS 1906.4:2010 - HIGH VISIBILITY MATERIALS FOR SAFETY GARMENTS

This standard specifies the requirements for high-visibility materials for outdoor daytime use, or retro-reflective materials for use at night or in other dark conditions. Designed to be worn in situations where the wearer needs to be highly visible. The standard specifies minimum colour and luminance requirements for fluorescent (F), non-fluorescent (NF) and retro-reflective materials.

CLASS F (FLUORESCENT BACKGROUND MATERIAL)

Refers to fluorescent fabrics which have the ability to retain fluorescent pigment. Often, but not limited to, man-made fibres such as polyester and plastic coatings.

CLASS NF (NON-FLUORESCENT BACKGROUND MATERIAL)

Refers to Non-fluorescent background material. Class NF materials do not have the fluorescent properties of class F materials and will provide reduced luminance for the wearer. Where for safety reasons a garment must be made from natural fibre which is unable to retain fluorescent colour class NF fabric can be used. These are often, but not limited to, cotton and FR blends.

AS/NZS 4399:2017 - SUN PROTECTIVE CLOTHING

Products have been tested to the Australian/New Zealand standard for sun protective clothing AS/NZS 4399:2017 (Ultraviolet Protection Factor).

EN 343 PROTECTIVE CLOTHING - PROTECTION AGAINST RAIN

EN 343 is a European Standard for protective clothing that outlines a minimum level of protection against wet weather, and is tested for its ability to withstand heavy water pressure and for its breathability.

CHANGE FROM HRC TO PPE

You may have noticed, in our communication and labelling, a change from HRC to PPE, on the Arcguard range. Most obvious is the change to the woven badge on Arcguard garments that denotes the Arc Rating and the corresponding category. This is because the standard that sets these categories has had an update. This standard is NFPA 70E.

NFPA 70E

Standard for Electrical Safety in the Workplace. NFPA 70E is a globally used American consensus standard that addresses electrical safety in the workplace. It explains how to protect electrical workers against electrical hazards. This standard is revised every three years.

One revision you will start to notice is the change from HRC to PPE. In 2015 NFPA 70E eliminated the term Hazard Risk Category (HRC) and replaced it with Personal Protection Equipment Category. This can be shortened to CAT or PPE. Arcguard uses PPE.

Most importantly the category levels remain the same. The minimum arc rating for PPE is the same as HRC. The change is merely a name to more accurately describe the function of the categories.

NEW: PPE	FORMER: HRC	Minimum Arc Rating CAL/CM^2
1	1	4.0
2	2	8.0
3	3	25.0
4	4	40.0

All of our Arcguard garments exceed the 8.0 cal/cm^2 minimum requirement for PPE 2.

ASTM F1959/F1959M AND IEC 61482-1-1

Standard Test Method for Determining the Arc Rating of Materials for Clothing. This standard test method is used to measure the arc rating of materials intended for use as flame resistant clothing for workers exposed to electric arcs.

ISO 14116

Protective clothing - Protection against flame - Limited flame spread materials, material assemblies and clothing. Garments certified to this standard protect workers from occasional and brief contact with small igniting flames, in circumstances where there is no heat hazard from flame or other source. The standard specifies limited flame spread properties in order to reduce the possibility of the clothing burning and thereby itself becoming the hazard.

ISO 11611:2015

Protective clothing for use in welding and allied processes. This standard specifies minimum basic safety requirements and test methods for protective clothing which is intended to protect the wearer against spatter (small splashes of molten metal), short contact time with flame, radiant heat from an electric arc used for welding and allied processes. It also minimizes the possibility of electrical shock by short-term, accidental contact with live electrical conductors in normal conditions of welding.

ISO 11612:2015

Protective clothing - Clothing to protect against heat and flame - Minimum performance requirements. These performance requirements are applicable to protective clothing where there is a need for clothing with limited flame spread properties and where the user can be exposed to radiant/ convective/contact heat or to molten metal splashes.

EN 1149:2008

Protective clothing. Electrostatic properties. Material performance and design requirements. The EN 1149 standard specifies a test method for materials to be used in the production of protective clothing with electrostatic dissipation for preventing incendiary discharge.

EN 1149-3:2008

Protective clothing. Electrostatic properties. Test methods for measurement of charge decay. The fabric releases its electrostatic charge to the air therefore won't conduct it to the user of the clothing. The standard contains a test method in which the amount of time it takes to dissipate electrostatic charge from the surface of the clothing material.

EN 1149-5:2008

Electrostatic properties. Performance requirements and material design. This is the European Standard for garments that protect against electrostatic discharge in areas where there is a risk of explosion and where there is a risk that the garments could create sparks (source of ignition), which in turn could ignite explosive materials.

TTMC-W17 FAQ'S

WHAT'S THE DIFFERENCE BETWEEN POLYESTER, COTTON OR POLYCOTTON?
- Polyester is a synthetic fabric that is tough, lightweight and quick drying and can be washed and dried at home with ease.
- Cotton is a natural fibre which is soft and breathable and known to be hypoallergenic. Being breathable means it is perfect for hotter conditions.
- Polycotton is a blend of synthetic polyester and natural cotton. The benefit of polycotton is the balance between the durability of polyester and breathability of cotton.

WHAT IS A WICKING PANEL ON YOUR POLOS?
Our polos have Moisture Wicking panels that push sweat and moisture to the outer surface of the fabric, which enables rapid drying. The wicking properties rely on 'capillary action' which in textiles is the movement of a liquid through tiny spaces within a fabric. Wicking polyester will always keep the wearer comfortable.

WHAT IS THE BENEFIT OF THE COTTON BACK POLOS?
You get the best of both worlds with a cotton backed fabric! The comfort, breathability, and odour control of cotton against your skin, and the moisture wicking, and fluorescent qualities of polyester on the outside.

WHY X-BACK TAPE DESIGN OVER H-BACK DESIGN?
The X-back design was brought in to help differentiate the front to back of a worker who may be working at night or in low light. Standard H-back designs are the same at the front and back. Utilising the X-back design means you can easily distinguish whether a wearer is facing you or has their back to you.

WHY DO XS SIZED TTMC-W17 GARMENTS COME WITH A WARNING?
TTMC-W17 XS garments come with an extra warning label. XS garments in a compliant design range are unable to meet the minimum 0.21m^2 (front) and 0.24m^2 (rear) area of compliant high visibility background material. The garment will be deemed to comply provided the design grading decreases proportionately without affecting the design integrity of the compliant 100-105cm test size of the garment range. All Bison and Arcguard XS garments are certified.

TTMC-W17
EXTRA SMALL SIZE

Warning
Reduced visibility
Where practicable avoid work in high risk areas

HOW DOES BRANDING WORK ON TTMC-W17 GARMENTS?
TTMC-W17 garments must not display any lettering, symbols or logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment. The maximum area for branding is 7500mm^2, for example this could be 10cm x 7.5cm logo or 8.5 and 8.5cm logo.

Arc rated TTMC-W17 garments are required to display the level of protection that they provide. For these garments a fabrics technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm^2) to the wearer's upper front right side of a garment.

WHAT IS UPF CLOTHING?
The UPF (Ultraviolet Protection Factor) is a numerical rating given to clothing to indicate how effectively the fabric blocks ultraviolet (UV) radiation. A UPF rating of 30 and over is classed as a 'Very Good' protection blocking about 96.0 – 97.4% of UV radiation. A UPF rating of 50 and over is classed as 'Excellent' protection blocking about 97.5% or more of UV radiation. Darker colours generally offer a greater protection against UV radiation.

WHAT ARE THE TELL-TALE SIGNS MY GARMENTS ARE NO LONGER COMPLIANT?
The most obvious signs of non-compliance are faded hi-vis fabric, cracking, or other damage to the retro-reflective tape. The best way to protect garments is to wash regularly, following care instructions, and to store them out of direct sunlight. A garment left in the car on a sunny day will fade and damage quickly. When your garments is not in use store in a dark place like a drawer or cupboard.

WHAT IS THE BENEFIT OF A LONG TAIL ON TOPS?
The long tail of a TTMC-W17 garment ensures you are still visible even if bending.

DO YOU BRAND GARMENTS?
We don't do branding, but your Territory Manager can give you contacts of branding companies we recommend. Branding on indent orders is possible in some cases.

WHAT WARRANTY DOES APPAREL HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

TTMC-W17

PRACTISING SAFETY IN THE HEAT

A GUIDE TO RECOGNISE AND DEAL WITH HEAT RELATED ILLNESS

KNOW THE SIGNS

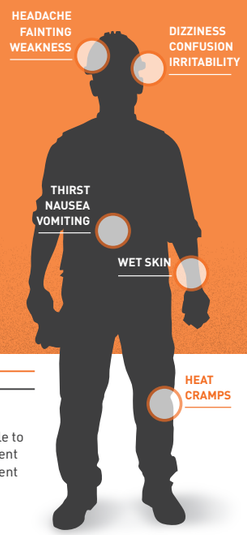
Recognize the warning signs and symptoms of heat related illness: headache, dizziness, fainting, weakness, wet skin, irritability, confusion, thirst, nausea, vomiting.

STAY HYDRATED

Drink water every 15 minutes - don't wait until you're thirsty. Don't drink liquids that contain alcohol or large amounts of sugar as these cause you to dehydrate. Alternate water with specially designed workplace rehydration drinks like Thorzt to help replace electrolytes.

STAY COOL

Give your body time to slowly acclimate to the weather.
Schedule frequent rest periods in cool, shaded areas.
Limit sun exposure and time in high temperatures.
Wear loose, lightweight clothing and a wide-brimmed hat.



A GUIDE TO SPOTTING THE SYMPTOMS OF HEAT RELATED ILLNESS

HEAT EXHAUSTION
This can develop after several days of exposure to high temperatures and inadequate fluid intake.

HEAT CRAMPS
Muscle spasms in the abdomen, arms or legs.

HEAT STROKE
A condition that occurs when the body is unable to regulate its temperature. It can cause permanent disability and even death if emergency treatment is not provided. A worker suffering from Heat Stroke may become confused, unable to think clearly, pass out, collapse or have seizures.

THE RISK FACTORS

Waterproof clothing can cause overheating.

Poor physical condition or health problems.

Too much alcohol or caffeine. Lack of sleep or eating disorders.

STEPS TO TAKE

HOW TO REACT IF A WORKMATE BECOMES OVERHEATED

Call a supervisor or co-worker. If they're not available call 111.

Move them to a cool shaded area.

Fan and mist the worker to cool them down. Stay with them until help arrives.

233010X POLO TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Reflective X-back tape for front-to-back differentiation
- UPF 50+ main fabric

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

2430520 POLO TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pocket with button closure
- Reflective tape
- UPF 30 Protection

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL

2330510 POLO TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pocket with button closure
- Reflective tape
- UPF 30 Protection

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL

233020 POLO TTMC-W17 QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Chest pocket with velcro closure flap, reflective tape
- UPF 50+ main fabric

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

243020 POLO TTMC-W17 QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Chest pocket with velcro closure flap
- Stretch reflective tape
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

243020X POLO TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking panels for superior comfort and ventilation
- Chest pocket with velcro closure flap
- Stretch reflective X-back tape for front-to-back differentiation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

243010 POLO TTMC-W17 QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Sports style collar, zipped chest pocket
- Ultra-Flect™ multi-directional segmented tape
- Wicking mesh panels for superior comfort and ventilation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** S-3XL, 5XL, 8XL

W24301OX POLO WOMEN'S TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking mesh panels for superior comfort and ventilation
- Ultra-Flect™ segmented X-back tape for front-to-back differentiation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24, 26

213020 SHIRT TTMC-W17 LIGHTWEIGHT COTTON

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Chest pockets with button flaps, velcro closure cell phone pocket
- Roll-up sleeves with button tab
- Contrast collar and cuff to minimise grime build-up
- Ultra-Flect™ tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm 100% Cotton Drill
- **Colour:** Orange (Navy collar) / **Sizes:** S-5XL, 8XL

522051STMSY VEST STMS TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- Certified STMS badge on chest and back
- Reflective tape

- **Industries:** Roading
- **Fabric:** 100% Polyester
- **Colour:** Yellow / **Sizes:** S-6XL, 8XL

523050 VEST TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** 3XS-6XL, 8XL

533050X VEST TTMC-W17 X-BACK POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Tapered long sleeves
- Reflective X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** XS-6XL, 8XL

393050N POLAR FLEECE TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- ¼ Zip front opening
- Zipped front pockets
- Pen pocket on sleeve
- Stretch reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300gsm Anti-pill fleece
- **Colour:** Orange/Navy / **Sizes:** XS-4XL, 6XL, 8XL

523050X VEST TTMC-W17 X-BACK POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Reflective X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** XS-6XL, 8XL

533050 VEST TTMC-W17 POLYESTER

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front
- Cellphone pocket with velcro closure flap
- ID card holder on chest pocket
- Collar for sun protection
- Reflective tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 100% Polyester
- **Colour:** Orange / **Sizes:** S-6XL, 8XL

363050 JACKET TTMC-W17 SOFTSHELL

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F.

- Zip front with storm flap cover, reflective tape
- Clear ID pocket on right-side chest
- Chest pocket under storm flap on left hand side
- Moulded velcro adjustment tabs on sleeves
- Zip off hood with peripheral vision adjuster

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 3-layer softshell fabric. Polyester and TPU membrane
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

4330230N OVERALL WORKZONE TTMC-W17 LIGHTWEIGHT COTTON ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Non-conductive two-way zip, reflective tape
- Chest pockets: Vertical zip on right hand side, pocket with flap left hand side, cargo pocket on right leg, adjustable button cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 190gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

4330220N OVERALL WORKZONE TTMC-W17 LIGHTWEIGHT COTTON ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class NF. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- YKK non-conductive two-way zip, Ultra-Flect™ tape
- Zipped chest pockets, internal phone pocket, vented back panels
- Cargo pocket on left leg, tool pocket on right leg

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 210gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

4330220NX OVERALL WORKZONE TTMC-W17 X-BACK COTTON ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.1996.

- Chest pockets: Flap with velcro closure on right hand side, pocket with pen partition on left, double comm's loop on chest
- Ultra-Flect™ X-back tape for front-to-back differentiation

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300gsm 100% Cotton
- **Colour:** Orange/Navy / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 132R

313052ON JACKET EXTREME TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, removable fleece liner
- 450D 3-layer Stratatek fabric has best tear strength, phenomenal abrasion resistance and high flexibility, neoprene storm cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Orange/Navy / **Sizes:** S-4XL, 6XL, 8XL

W313050N JACKET EXTREME WOMEN'S TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, removable fleece liner, removable hood
- 450D 3-layer Stratatek fabric has best tear strength, phenomenal abrasion resistance, and high flexibility, neoprene storm cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Orange/Navy / **Sizes:** 8, 10, 12 , 14, 16, 18, 20, 22

313051OX JACKET EXTREME TTMC-W17 X-BACK

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:25,000mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (25,000mm waterproof rating)
- Ultra-Flect™ Segmented X-back tape for front-to-back differentiation, zip off/foldaway hood
- Neoprene storm cuffs, two-way YKK zip with double storm flap

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D 3 layer Stratatek / **Lining:** Polyester knit tricot lining
- **Colour:** Orange/Black / **Sizes:** S-4XL, 6XL, 8XL

COMBINE WITH 513050 OR 51305OX

323050 JACKET STAMINA TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Two-way zip with double storm flap and rain-gutter
- Arms stay dry with Storm cuffs, Ultra-Flect™ tape, fold away hood
- Has internal zip designed to take the Bison Stamina 513050

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Polyester knit mesh lining
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

COMBINE WITH 513050 OR 51305OX

323050X JACKET STAMINA TTMC-W17 X-BACK

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Ultra-Flect™ X-back tape for front-to-back differentiation
- Polyester mesh lining and neoprene storm cuffs, fold away hood
- Has internal zip designed to take Bison Stamina 51305OX

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Polyester knit mesh lining
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

323000N JACKET STAMINA PU TTMC-W17 LIGHTWEIGHT

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water resistance up to H20:20,000mm.

- 6hr Waterproof Guarantee (Up to 20,000mm waterproof rating)
- Comfortable, light and flexible stretch PU
- Eyelets for ventilation, reflective tape
- Hideaway hood – space in collar to tuck away hood

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** Stretch PU fabric
- **Colour:** Orange/Navy / **Sizes:** S-4XL, 6XL, 8XL

343050 JACKET STAMINA TTMC-W17 5-IN-1 VEST COMBO

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Outer jacket: Polyester mesh lining, hideaway hood, large front pockets
- Internal jacket, that zips into the outer jacket, is a fleece lined vest with removeable sleeves, Ultra-Flect™ tape

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Inner fleece, Polyester mesh
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

ZIPS INSIDE 323050 & 323050X

513050 VEST STAMINA TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Wider shoulder for added protection, Ultra-Flect™ tape
- Dual entry fleece lined front pockets
- Vest zips inside Bison Stamina 323050 (46RJKT) & 323050X (JXPOP)

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Fleece
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

ZIPS INSIDE 323050 & 323050X

513050X VEST STAMINA TTMC-W17 X-BACK

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:20,000mm. Breathability: 4,000g/m2/24hr.

- 6hr Waterproof Guarantee (20,000mm waterproof rating)
- Ultra-Flect™ X-back tape for front-to-back differentiation
- Dual entry fleece lined front pockets
- Vest zips inside Bison Stamina 323050 (46RJKT) & 323050X (JXPOP)

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing
- **Fabric:** 300D Poly Oxford, PU backing / **Lining:** Fleece
- **Colour:** Orange / **Sizes:** S-4XL, 6XL, 8XL

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36317ON JACKET ARCGUARD 16CAL
TTMC-W17 SOFTSHELL INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. ISO 11612:2015. A1, B1, C1. ISO 11611 Class 2. ISO 14116 Index 3/5I/40. EN 1149-5:2018. IEC 61482 -1-1:2019.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 16Cal/cm² ATPV HRC2/PPE2
- Large front pockets, long tail design for extra coverage
- Ultra-Flect™ FR Segmented tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 360gsm Inherent Modacrylic blend inner and Poly outer
- **Colour:** Orange/Navy / **Sizes:** XS-4XL, 6XL, 8XL

16 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

24312ON POLO ARCGUARD 10CAL
TTMC-W17 INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1, E1, F1. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 10Cal/cm² ATPV HRC2/PPE2
- Mandarin collar with placket, zip pocket on left-hand side chest
- Ultra-Flect™ FR Segmented tape, long tail design for extra coverage

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Knit Inheratex: Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** XS-3XL, 5XL, 6XL, 8XL

10 CAL · EN 1149-5:2018 · ISO 11612:2015

213171ON SHIRT ARCGUARD 8.8CAL
TTMC-W17 INHERALITE

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60. IEC 61482-1-1: 2019, EN 1149-5:2018. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Arc Rated / Inherent FR / Antistatic / 8.8Cal/cm² ATPV HRC2/PPE2
- Lightweight protection, button down front
- Chest pockets with button flaps, phone pocket on right-hand side
- Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 185gsm Ripstop Lenzing FR Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** S-6XL, 8XL

50+ · 8.8 CAL · EN 1149-5:2018 · ISO 11612:2015

213172RBO SHIRT ARCGUARD 12CAL
TTMC-W17 INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, A2, B1, C1, E3, F1. ISO 11611 Class 1, A1+A2. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 12Cal/cm² ATPV HRC2/PPE2
- Button down front, chest pockets with button flaps
- Phone pocket on right-hand side, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Inheratex: Modacrylic blend
- **Colour:** Royal Blue/Orange / **Sizes:** S-6XL, 8XL

12 CAL · EN 1149-5:2018 · ISO 11612:2015 · ISO 11611:2015

243170NX POLO ARCGUARD 10CAL
TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1, E1, F1. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 10Cal/cm² ATPV HRC2/PPE2
- Ribbed collar with placket, zip pocket on left-hand side chest
- Ultra-Flect™ FR Segmented tape, X-back tape for front-to-back differentiation, long tail design for extra coverage

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Knit Inheratex: Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** XS-3XL, 5XL, 6XL, 8XL

10 CAL · EN 1149-5:2018 · ISO 11612:2015

21312RBO SHIRT ARCGUARD 11CAL
TTMC-W17 COTTON BLEND

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 1149-5:2018, EN 61482-1-2:2015 Class 1 (4KA).

- Arc Rated / FR / Antistatic
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2, Ultra-Flect™ FR tape
- Button down front, chest pockets with button flaps
- Phone pocket on right-hand side, vented back

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm FR Cotton/Polyamide/Carbon blend
- **Colour:** Royal Blue/Orange / **Sizes:** XS-6XL, 8XL

11 CAL · EN 1149-5:2018 · ISO 11612:2015

213170N JACKET ARCGUARD 8.8CAL
TTMC-W17 INHERALITE

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60. IEC 61482-1-1: 2019, EN 1149-5:2018. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Arc Rated / Inherent FR / Antistatic / 8.8Cal/cm² ATPV HRC2/PPE2
- Lightweight protection, non conductive vislon zip closure
- Chest pockets with velcro closure, velcro tabs at sleeve cuff
- Split side seam with velcro closure, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 185gsm Ripstop Lenzing FR Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** S-6XL, 8XL

50+ · 8.8 CAL · EN 1149-5:2018 · ISO 11612:2015

213122RBOX JACKET ARCGUARD 11CAL
TTMC-W17 X-BACK COTTON BLEND

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ASTM F1959/F1959M. Fire Retardant, Arc Protection. ISO 14116 Index 3/5I/75.

- Arc Rated / FR
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2
- Chest pockets with velcro closure, adjustable velcro tabs at sleeve cuff
- Non conductive vislon zip closure with placket to protect zip
- Reflective FR X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Cotton/Polyamide blend
- **Colour:** Royal Blue/Orange / **Sizes:** S-6XL, 8XL

11 CAL

253170X HOODED SWEATSHIRT ARCGUARD 18.4CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). Design certified to: AS/NZS 4602.1:2011+ Amdt 2:2020 Class DN. 1906.4.2010 Class NF, IEC 61482-1-1:2009, ISO 11612:2015 Class A1 B1 C2, ISO 14116 Index 3/5H/40. EN1149-5:2018.

- Arc Rated / Inherent FR / Antistatic
- Arc rating: 18.4Cal/cm² ATPV HRC2/PPE2
- Quarter-zip at centre front, zipped waist pockets
- Ultra-Flect™ FR Segmented X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 400gsm Modacrylic blend - single side brushed fleece
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

18.4 CAL

EN 1149-5:2018 ISO 11612:2015

433173ON OVERALL ARCGUARD 8.8CAL TTMC-W17 INHERALITE ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + Amdt 2:2020 Class DN. AS/NZS 1906.4.2010. ISO 11612:2015. A1, B1, C1. ISO 14116 Index 3/5H/60. IEC 61482-1-1: 2019, EN 1149-5:2018. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Arc Rated / Inherent FR / Antistatic / 8.8Cal/cm² ATPV HRC2/PPE2
- Lightweight protection, YKK front zip, velcro tabs at sleeve cuff
- Back pocket/tool pocket on right, cargo pocket on left, zips at hem
- Chest pockets, comm's loops at chest, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 185gsm Ripstop Lenzing FR Modacrylic blend
- **Colour:** Orange/Navy / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R, 142R

50+ 8.8 CAL

EN 1149-5:2018 ISO 11612:2015

43317RBO OVERALL ARCGUARD 12CAL TTMC-W17 INHERATEX ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015. A1, A2, B1, C1, E3, F1. ISO 11611 Class 1, A1+A2. ISO 14116 Index 3/5I/60. ASTM F1959/F1959M, EN 1149-5:2018.

- Arc Rated / Inherent FR / Antistatic / 12Cal/cm² ATPV HRC2/PPE2
- Back pocket, tool, cargo and radio pockets, gusset at lower leg
- YKK non-conductive two-way zip, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Inherent-FR Modacrylic blend
- **Colour:** Royal Blue/Orange / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

12 CAL

EN 1149-5:2018 ISO 11612:2015 ISO 11611:2015

433121RBO OVERALL ARCGUARD 11CAL TTMC-W17 COTTON BLEND ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ISO 11612:2015-A1, A2, B1, C1, ISO 14116 Index 3/5I/75, ASTM F1959/F1959M, EN 1149-5:2018, EN 61482-1-2:2015 Class 1 (4KA).

- Arc Rated / FR / Antistatic / 11Cal/cm² ATPV HRC2/PPE2
- Back pocket/tool pocket on right, cargo pocket on left, radio pocket
- YKK non-conductive two-way zip, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm FR Cotton/Polyamide/Carbon blend
- **Colour:** Royal Blue/Orange / **Sizes:** 72R, 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R, 127R, 132R

11 CAL

EN 1149-5:2018 ISO 11612:2015

43312RBOX OVERALL ARCGUARD 11CAL TTMC-W17 X-BACK COTTON BLEND ZIP

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4.2010 Class NF. ASTM F1959/F1959M. Fire Retardant, Arc Protection. ISO 14116 Index 3/5I/75.

- Arc Rated / FR
- Arc rating: 11Cal/cm² ATPV HRC2/PPE2
- Vislon zip, chest pocket on right, twin cargo pockets on leg
- Reflective FR X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 240gsm Cotton/Polyamide blend
- **Colour:** Royal Blue/Orange / **Sizes:** 76R, 80R, 84R, 88R, 92R, 97R, 102R, 107R, 112R, 117R, 122R

11 CAL

COMBINE WITH 513170X

323170NX JACKET ARCGUARD 29CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011+ AMDT 2:2020 Class DN. 1906.4.2010 Class F. ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- 2-way YKK zip front, storm cuffs, tuck away or removable hood
- Ultra-Flect™ FR Segmented X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Orange/Navy / **Sizes:** XS-4XL, 6XL, 8XL

ZIPS INSIDE 323170NX

513170X VEST ARCGUARD 29CAL TTMC-W17 X-BACK INHERATEX

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011+ AMDT 2:2020 Class DN. 1906.4.2010 Class F. ISO 11612:2015 Class A1 B1 C1 F1. ISO 11611:2015 Class 1, A1. ISO 14116 Index 3/5H/40. ASTM F1959/F1959M E1, 61482-1-2:2014, EN1149-5:2018. Water Resistance H20:16,000+mm. Breathability: 4,000g/m2/24hr.

- Arc Rated / Inherent FR / Antistatic / 29Cal/cm² ATPV HRC3/PPE3
- FR cotton fleece liner, dual entry front pockets, comm's loop
- Ultra-Flect™ FR Segmented X-back tape for front-to-back differentiation

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford/Antistatic carbon grid/Modacrylic liner
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

COMBINE WITH 513150

3231510 JACKET STAMINA FR & ANTISTATIC TTMC-W17 FLEECE LINED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. Water Resistance H20:16,000mm. Breathability: 4,000g/m2/24hr. AS/NZS 1906.4.2010 Class F, ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

- Antistatic and FR - Index1
- 6hr Waterproof Guarantee (16,000mm waterproof rating)
- Removeable fleece lining, removeable/tuck away hood
- Internal radio pocket and mobile phone pocket, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford, Antistatic carbon grid, with PU backing
- **Colour:** Orange / **Sizes:** XS-4XL, 6XL, 8XL

ZIPS INSIDE 3231510

513150 VEST STAMINA FR & ANTISTATIC TTMC-W17 FLEECE LINED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. Water Resistance H20:16,000mm. Breathability: 4,000g/m2/24hr. AS/NZS 1906.4.2010 Class F, ISO 14116 Index 1/5H/40 Limited Flame Spread. EN1149-5:2018.

- Antistatic and FR - Index1
- 6hr Waterproof Guarantee (16,000mm waterproof rating)
- Chest pocket on left side, comm's loop on right side
- Fleece lined side pockets, large front pockets, Ultra-Flect™ FR tape

- **Industries:** Infrastructure & Roading, Oil & Gas, Mining, Utilities
- **Fabric:** 300D Poly Oxford, Antistatic carbon grid, with PU backing
- **Colour:** Orange / **Sizes:** S-4XL, 6XL

TTMC-W17
HIGH RISK

W243010X POLO WOMEN'S TTMC-W17 X-BACK QUICK-DRY COTTON BACKED

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Ultraviolet Protection Factor certified to: AS/NZS 4399.2017.

- Wicking mesh panels for superior comfort and ventilation
- Ultra-Flect™ segmented X-back tape for front-to-back differentiation
- UPF 50+ main fabric, UPF 30 wicking panels

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 150gsm Polyester with Cotton back
- **Colour:** Orange (Navy collar) / **Sizes:** 8, 10, 12, 14, 16, 18, 20, 24, 26

W313050N JACKET EXTREME WOMEN'S TTMC-W17

Standards: TTMC-W17 (CoPTTM). AS/NZS 4602.1:2011 + AMDT 2:2020 Class DN. AS/NZS 1906.4:2010 Class F. Water Resistance H20:30,000+mm. Breathability: 4,000g/m2/24hr.

- 12hr Waterproof Guarantee (30,000+mm waterproof rating)
- Ultra-Flect™ Segmented tape, removable fleece liner, removable hood
- 450D 3-layer Stratatek fabric has best tear strength, phenomenal abrasion resistance, and high flexibility, neoprene storm cuffs

- **Industries:** Construction & Trades, Infrastructure & Roading, Mining Agriculture & Forestry, Manufacturing, Transport & Logistics
- **Fabric:** 450D, 3 layer Stratatek / **Lining:** Inner fleece, tricot lining
- **Colour:** Orange/Navy / **Sizes:** 8, 10, 12 , 14, 16, 18, 20, 22

COLOUR GUIDE

AN EASY GUIDE TO CHOOSE YOUR TEAM COLOURS

Orange and contrast colours	172-173
Navy colours	173
Yellow and contrast colours	174
Grey and Charcoal colours	174
Black and contrast colours	175
Royal Blue and contrast colours	175
Green colours	175
White and contrast colours	175

BISON

ORANGE

523050

523050X

533050

533050X

323050

323050X

343050

513050

513050X

140051OT

120051OT

253170X

513170X

140170T

323151O

513150

120150T

ORANGE WITH NAVY

261050N

231050N

231011O

231012ON

W23101ON

232050N

232012O

232011ON

W232010N

233051O

233020

233010X

243052O

243020

243020X

243010

W243010X

211020N

2120210NX

213020

391050N

393050N

433023ON

433022ON

433020NX

452022ON

432021ON

431021ON

441020N

410022ON

410010N

313052ON

313051OX

W313050N

323000N

322050N

512050N

512051ON

140050NT

140053ONT

120050NT

363170N

243120N

243170NX

212170N

213171ON

213170N

433173ON

*HIGH RISK RANGE IN RED

ORANGE WITH NAVY / BLACK / ROYAL BLUE / WHITE

432120N

4311210N

323170NX

231051O

250050BK

363050

1700310BKT

120050BKT

140150BKT

43201RBO

43101RBO

21312RBO

213172RBO

213122RBOX

43317RBO

433121RBO

43312RBOX

432121RBO

4300132WO

380012WO

NAVY

18001N

W17001N

170012N

17003N

18002N

180015NT

W170015NT

170035NT

17002NT

19001N

W19001N

19002N

430012N

44002N

430023N

140054NT

12000NT

170171NT

170121NT

14017NT

12017NT

*HIGH RISK RANGE IN RED

YELLOW

29105Y

52205Y

522051STMSY

140051YT

120051YT

33009Y

15009Y

13009Y

YELLOW WITH NAVY

26105YN

231052Y

231051Y

23105YN

231011Y

231012YN

W23101YN

23205YN

232012Y

232011YN

W23201YN

21102YN

212021YNX

39105YN

39205YN

36205YN

432021YN

431021YN

41001YN

312052YN

34205YN

32205YN

51205YN

32200YN

512051YN

14005YNT

21217YN

25217YN

43212YN

32217YN

51217YN

YELLOW WITH SPRUCE / BLACK / ROYAL BLUE / WHITE

23205SPY

43101SPY

41001SPY

25005YBK

43201YRB

43101YRB

380012WY

GREY AND CHARCOAL

29005GY

18001CH

19001CH

430012CH

*HIGH RISK RANGE IN RED

BLACK WITH GREY / NAVY / RED / ROYAL BLUE

29005BK

22001BK

210012BK

170012BK

18002BK

19002BK

430023BK

220012BKGY

210011BKGY

25005GYBK

430011BKGY

430021BKGY

25005NBK

220012BKR

210011BKR

430011BKR

ROYAL BLUE / ROYAL BLUE/GREY / BLACK/ROYAL BLUE

430012RB

17012RBT

430011RBGY

430011BKRB

GREEN

33009GN

15009GN

13009GN

WHITE

460014W

460015W

430013W

430015W

280014W

280016W

280011W

280013W

17001W

380013W

WHITE WITH ORANGE/YELLOW

4300132WO

380012WO

380012WY

*HIGH RISK RANGE IN RED

BISON WORKWEAR SIZE CHART

Men's Chest: Put the tape measure under your arms around the widest part of your chest. Don't hold the tape measure too tight, it should be resting on your chest, not squeezing you.

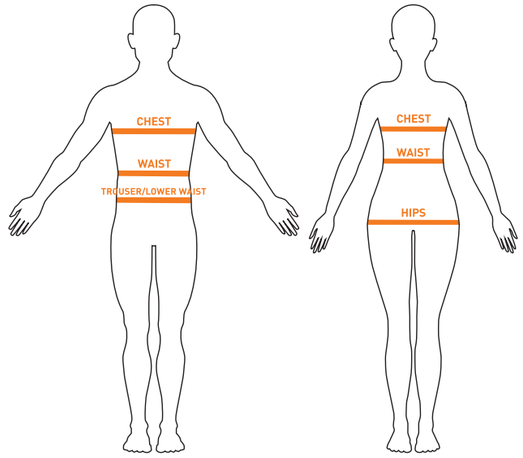
Men's Waist: Place the tape measure around the narrowest part of your waist, typically where your body bends side to side. Remember don't hold the tape measure too tight.

Men's Trouser/Lower Waist: Measure where you like to wear your trousers. Place the tape measure over your underwear at the level your trousers usually sit. Only wear underwear and remember don't hold the tape too tight.

Women's Chest: Wearing the type of bra you would normally wear to work, put the tape measure under your arms around the widest part of your chest. Don't hold the tape measure too tight, it should be resting against your chest.

Women's Waist: Place the tape measure around the narrowest part of your waist. Remember don't hold the tape measure too tight - it should be touching your skin but not squeezing the life out of you.

Women's Hips: Place the tape measure around the widest part of your hips - usually mid bum, you can do this wearing underwear, but not trousers.



Note: Measurements are body measurements.

Overalls/Dustcoats

Metric Size	72R	76R	80R	84R	88R	92R	97R	102R	107R	112R	117R	122R	127R	132R	142R
Previous Size	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18
Chest (cm)	80-84	84-88	88-92	92-96	96-100	100-105	105-110	110-115	115-120	120-125	125-130	130-135	135-140	140-145	150-155
Waist (cm)	70-74	74-78	78-82	82-86	86-90	90-95	95-100	100-105	105-110	110-115	115-120	120-125	125-130	130-135	140-145
Chest (in)	32-34	34-35	35-37	37-38	38-40	40-42	42-44	44-46	46-48	48-50	50-52	52-54	54-56	56-58	60-62
Waist (in)	28-30	30-31	31-33	33-34	34-36	36-38	38-40	40-42	42-44	44-46	46-48	48-50	50-52	52-54	56-58

Men's Singlets, T-Shirts, Polos, Shirts, Vests, Polar Fleece, Jackets, Hooded Sweatshirt, Jerkins

Size	3XS	2XS	XS	S	M	L	XL	2XL	3XL	4XL	5XL	6XL	7XL	8XL
Chest (cm)	75-80	80-85	85-90	90-95	95-100	100-105	105-112	112-119	119-126	126-133	133-140	140-147	147-154	154-161
Chest (in)	30-32	32-34	34-36	36-38	38-40	40-42	42-45	45-48	48-50	50-53	53-56	56-59	59-62	62-64

Men's Trousers, Shorts

Size	67	72	77	82	87	92	97	102	107	112	117	122	127	132
Lower Waist (cm)	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100-105	105-110	110-115	115-120	120-125	125-130	130-135
Lower Waist (in)	26-28	28-30	30-32	32-34	34-36	36-38	38-40	40-42	42-44	44-46	46-48	48-50	50-52	52-54

Rainwear Trousers, Rainwear Bib Trousers, Food Industry Trousers

Size	XS	S	M	L	XL	2XL	3XL	4XL	6XL	8XL
Lower Waist (cm)	75-80	80-85	85-90	90-95	95-100	100-105	105-110	110-115	120-125	130-135
Lower Waist (in)	30-32	32-34	34-36	36-38	38-40	40-42	42-44	44-46	48-50	52-54

Women's Polos, Rainwear Jackets

Size	6	8	10	12	14	16	18	20	22	24	26	28
Chest (cm)	80-85	85-90	90-95	95-100	100-105	105-112	112-119	119-126	126-133	133-140	140-147	147-154
Chest (in)	32-34	34-36	36-38	38-40	40-42	42-45	45-48	48-50	50-53	53-56	56-59	59-62

Women's Trousers, Shorts

Size	6	8	10	12	14	16	18	20	22	24	26
Waist (cm)	70-75	75-80	80-85	85-90	90-95	95-102	102-109	109-116	116-123	123-130	130-137
Hips (cm)	90-95	95-100	100-105	105-110	110-115	115-122	122-129	129-136	136-143	143-150	150-157
Waist (in)	28-30	30-32	32-34	34-36	36-38	38-41	41-44	44-46	46-49	49-52	52-55
Hips (in)	36-38	38-40	40-42	42-44	44-46	46-49	49-52	52-54	54-57	57-60	60-63

BISON CARING FOR YOUR WORKWEAR

The correct wash cycle, care and storage of your workwear is important for its longevity, function and ongoing comfort. The right care is also conditional in order to guarantee specific functions in the garment. An example is that a Hi-Vis garment may be less effective and therefore, less safe if it is dirty. Please read and become familiar with the following care and washing instructions.

WASH

Every product has specific washing instructions, which is important to follow. They are suited to the particular garment's material and design. Where the washing instructions say "wash separately", this should be done. Alternatively, the garment can be washed with similar colours.

The globally accepted minimum for shrinkage is 3% on woven fabric and 5% on knit fabric. Every batch of Bison fabric is tested for performance, if shrinkage is higher than the minimums above the fabric is rejected and re-treated.

Certain clothes may need to be shaped somewhat to retain their form. When we say 'shaped' we mean, you may need to hang dry them on a shaped hanger or lie them flat in their natural shape to dry. It is also important that zips, buttons and Velcro closures are closed when the garment is washed. This reduces wear and tear on them and lengthens the garment's life.

PRE-WASH

The garments do not normally need pre-washing. In case of heavy soiling, pre-wash can be used, with the same quantity of detergent as used in the main wash. Do not soak the wash in advance as undissolved detergent can damage garments.

DETERGENT

Use laundry detergent for coloured garments. Do not use laundry detergent containing bleach. Check that the laundry detergent is intended for the garment's wash temperature. Follow the washing instructions on the laundry detergent pack.

Please be aware that fabric softeners can damage certain fabrics and their functions. For example, the breathability of water-repellent membranes can be impaired. We do not recommend the use of fabric softeners.

DRYING

We do not recommend tumble drying as an everyday solution. It is best to shake and smooth out the fabric, hang up or dry flat. If you do choose to tumble dry, follow the label temperature guide and do not allow the garment to dry completely as the greatest wear and shrinkage risk occurs at the latter stage of drying. Check the garment label carefully as there may be exceptions.

Rainwear garments are not recommended for tumble drying as high temperatures can damage the seam sealing.

DRY CLEANING

Most dry cleaning processes use perchloroethylene. We recommend you first check the care label to check garments are suitable for dry-cleaning as there may be exceptions.
Please note Polo's are not suitable for dry-cleaning.

INDUSTRIAL WASH

Industrial wash involves a large scale, professional laundry environment, in contrast to home laundry. Bison or Arcguard garments that state maximum wash temperature 75°C are suitable for this type of laundry. The ISO 15797 certification deals with industrial washing and drying, temperature, detergents and reactive substances which may be used.

We recommend a trial wash at the intended laundry before committing your garments to this. You may need to trial the laundry for 3 to 4 wash cycles to get an accurate understanding of how they perform.

HIGH-VISIBILITY GARMENTS

Soiling impairs the visibility of the Hi-Vis garment. For this reason, it is important to wash them frequently and to follow the washing instructions. Never wash Hi-Vis garments with laundry detergent containing bleach, because this impairs the garment's luminance. Hi-Vis clothing can be stored in a dry, well-ventilated space. Where garments need repairing, this must be done using fabric and thread that meets the garment's standard.

Garments should be stored in such a way to limit fading of fluorescent material and to prevent degradation of reflective material by excessive heat.

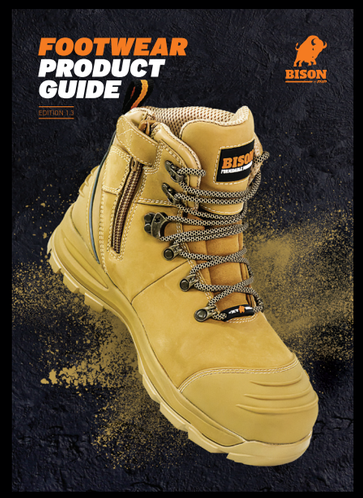
Garments should be inspected on a regular basis and replaced if they are badly damaged, soiled or faded, or retro-reflective tape has ceased to be fit for purpose. Failing to do this could potentially put the wearer at risk of non-compliance to AS/NZS 4602.1:2011 + AMDT 2:2020 and/or TTMC-W17 standards.

FOOTWEAR

In order to fulfil the safety stated characteristics, it is important that the shoes are always used and tied correctly. Also pay attention if the shoes are subject to heavy wear – check that the soles, seams and uppers are intact.

Clean the shoes regularly with a brush, remove any spots with a damp cloth and use shoe cream or wax on the leather uppers. Never clean shoes with substances such as petrol, acids or solvents.

The shoes should be stored in a dry, well-ventilated space. Never dry shoes next to a heat source such as a stove, radiator or drying cabinet. It is best to let them dry slowly in a well ventilated room at room temperature.

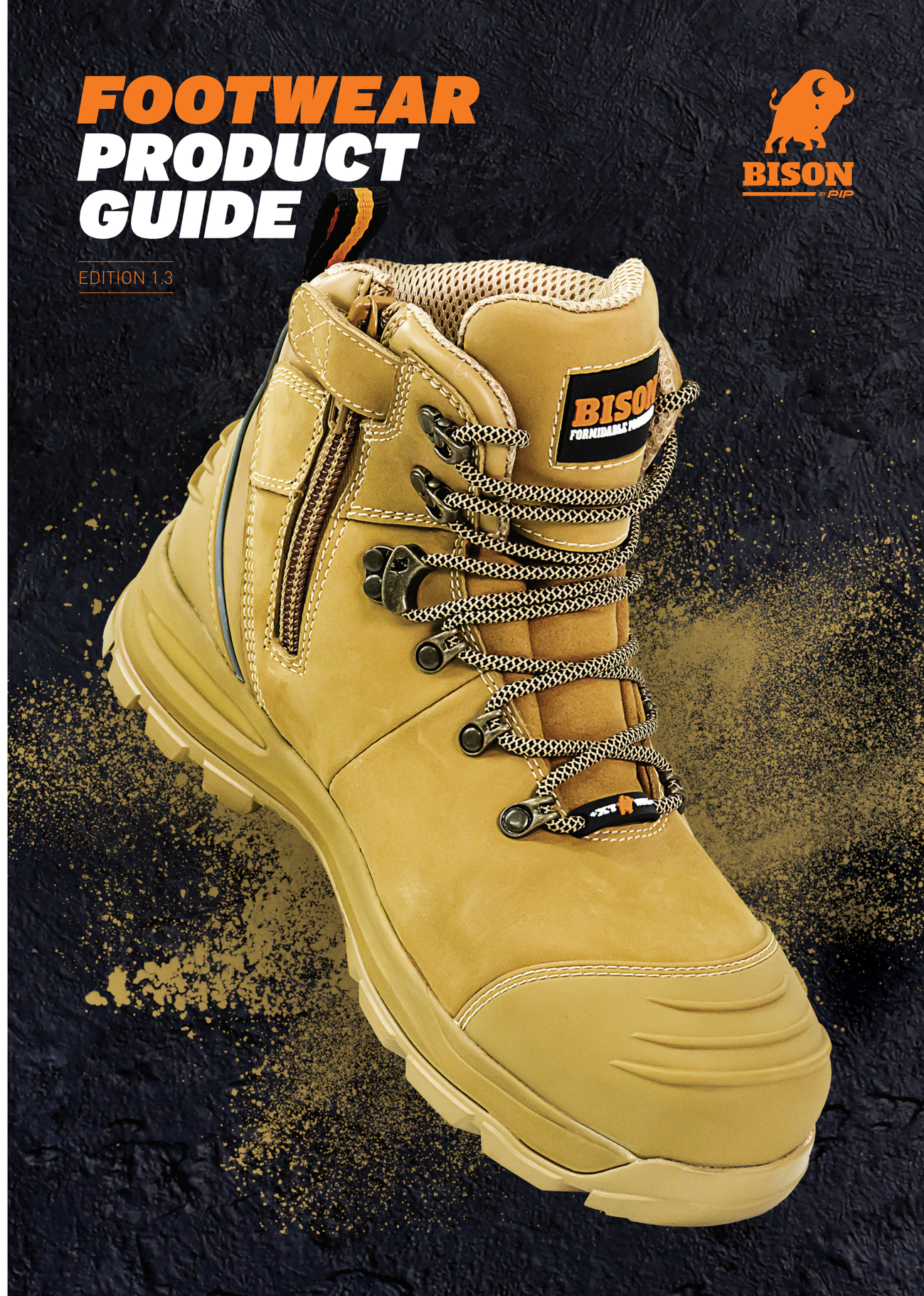


SAY BYE TO WORKWEAR AND HEY TO FOOTWEAR

FOOTWEAR PRODUCT GUIDE

EDITION 1.3

BISON BY PIP



PUTTING YOUR BEST FOOT FORWARD

All Bison Safety Boots and Gumboots are certified to AS 2210.3:2019. Whether you are after Zip side, Lace up or Slip on Safety Boots, PVC/Nitrile or Rubber/Neoprene Gumboots, Bison has you covered.

BISON

FOOTWEAR QUICK REFERENCE

ZIP SIDE
PG 18-21

XTLZST

XTLZWHE

XTLZBK

XTZBK

TORBK

DUNEBR

DUNEBK

LACE UP
PG 24

WOLFBK

DUTYBK

SLIP ON
PG 25

GRIZZLYBK

TRADEBK

RIDGECT

GUMBOOTS
PG 26

NEOBKO

INCAGSBKGY

MOHAWKWGY

MOHAWKWY

SOCKS
FOOTBED
LACES
PG 27

TSOCKGYB

BSBK

FBBK

XTLACEBKGY

FOOTWEAR

FOOTWEAR PROTECTION

BISON SAFETY FOOTWEAR COMPLIANCE

Bison Safety Footwear complies with the EN Directive for Personal Protective Equipment (Directive 89/686/EEC) and meets the requirements of the European standard EN ISO 20345:2011. Complies to AS 2210.3:2019.

SAFETY TOE CAPS STEEL/COMPOSITE PROTECTION

The footwear protects the wearer's toes against risk of injury from falling objects and crushing when worn.

- Impact protection provided is 200 Joules.
- Compression protection provided is 15 kN.

ANTISTATIC FOOTWEAR

Anti-static safety footwear is designed to prevent the build up of static electricity by conducting the static charge to the ground. This greatly reduces the risk of electric shock and is best used in workplaces such as petrochemical plants, airport tarmacs and anywhere you're exposed to flammable vapours.

ELECTRIC HAZARD RESISTANT FOOTWEAR (EH)

EH footwear is certified to the ASTM standard for EH - Electrical Hazard resistance. EH protective footwear is designed to reduce the hazards due to accidental contact with live electrical circuits and is only meant to be used as a secondary protection for electrical hazard environments.

CHOOSING THE RIGHT FOOTWEAR

Footwear should be chosen based on what is suitable for your workplace/environment as well as the hazards that are present.

- Safety footwear is designed to protect feet against a wide variety of injuries. Impact, compression and puncture are the most common types of foot injury.
- Choose footwear according to the hazard. Refer to AS 2210.3:2019 and EN ISO 20345: 2011 Standards.
- Select and ensure that boots have the proper rating for the hazard and the proper sole for the working conditions.

Risks to consider

- Materials handled or used by the worker.
- Risk of objects falling onto or striking the feet.
- Any material or equipment that might roll over the feet.
- Sharp or pointed objects that might cut the top of the feet.
- Objects that may penetrate the bottom or side of the foot.
- Possible exposure to corrosive or irritating substances.
- Possible explosive atmospheres including the risk of static electrical discharges.
- Risk of damage to sensitive electronic components or equipment due to the discharge of static electricity.
- Risk of coming into contact with energized conductors of low to moderate voltage (e.g. 220 volts or less).
- Type of walking surface and environmental conditions workers may be exposed to (e.g. loose ground cover, smooth surfaces, temperature, wet/oily, chemicals, etc).
- Slips and falls on slippery walking surfaces.

SAFETY STANDARDS GLOSSARY

EN ISO 20345 Standard	
SB	Safety footwear with toe cap protection, resistant to impact 200J, resistant to compression 15 kN, resistant to tear, Traction, abrasion, flexion, hydrocarbons, slippery, interlay bond strength, pH value, chrome V1 exclusion, permeability to water vapour and specific ergonomic features.
SBP	SB + Penetration resistance (Midsole)
S1	SB + E + A + Closed heel
S1P	S1 + Penetration resistance (Midsole)
S2	S1 + WRU
S3	S3 = S2 + P + Cleated sole

Outsole Slip Resistance: CE Standard: EN ISO 20344: 2011	
SRA	Test ground: Ceramic Lubricant: Water and detergent › 0.32 flat footwear › 0.28 footwear with a 7° heel
SRB	Test ground: Steel Lubricant: Glycerine › 0.16 flat footwear › 0.12 footwear with a 7° heel › 0.18 flat footwear › 0.13 footwear with a 7° heel
SRC	Both requirements stated above

Symbol Explanation	
A	Anti-static footwear
E	Energy absorption in heel area (20 Joules)
WRU	Water penetration and absorption of upper
P	Penetration resistance of sole
CI	Insulation against cold
HI	Insulation against heat
HRO	Resistance of the sole to heat per contact
WR	Water resistant footwear
M	Metatarsal protection (for EN ISO 20345 only)
AN	Protection of malleolar (ankle protection)
CR	Cut resistant upper (for EN ISO 20345 only)
C	Conductive (maximum resistance 100k ohms)
I	Insulating
FO	Resistance to fuel/oil resistant outsole
EH	Electrical Hazard Resistance

BISON ICONS AND STANDARDS GUIDE

FOOTWEAR ICONS AND STANDARDS

- AS 2210 — Manufactured to AS 2210.3:2019.
- EN ISO 20345 — Manufactured to EN ISO 20345:2011.
- S1 — S1 Anti-Static Footwear.
- SB P — SB P anti-penetration midsole.
- SB — Category SB - Basic requirements of safety footwear.
- SRC — SRC - slip resistant soles exceed in both slip resistance tests in EN ISO 20345:2011.
- SRB — Tested to AS 2210.3:2019 SRB Slip resistant rating (Stainless steel with glycerine).
- EH — Electrical Hazard (EH) ASTM F2413-18.
- Oil resistant sole.
- Acid resistant sole.
- 150° — Heat Resistant Sole capable of withstanding temperatures not exceeding 150°C.
- 300° — Heat Resistant sole capable of withstanding temperatures not exceeding 300°C.
- WRU — Water resistant upper (WRU).
- Energy absorption of Seat (heel) Region (E).
- WIDE FIT — Wide fitting footwear.
- The Benchmark mark is one of the most recognized symbols of quality and safety.

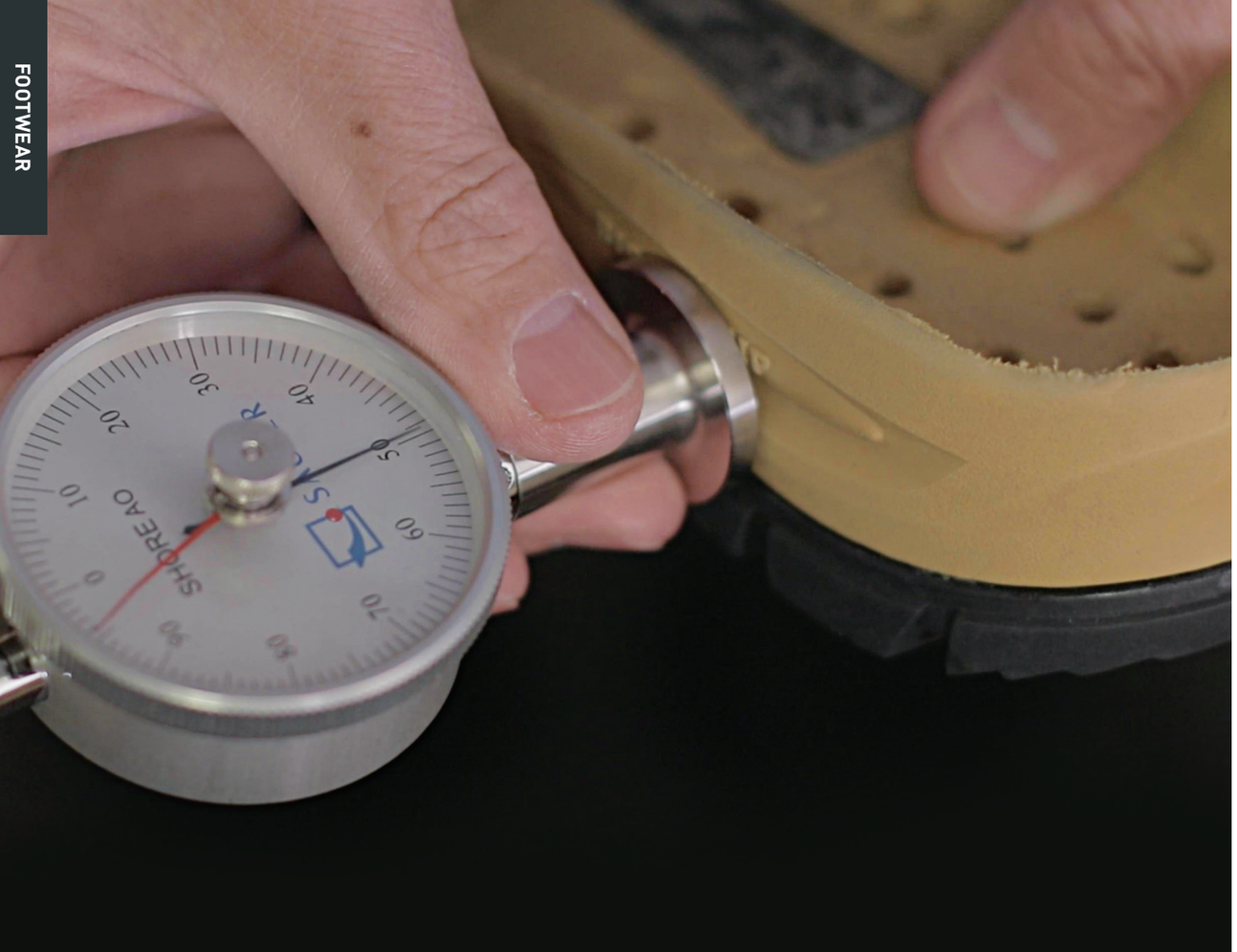
BISON INNOVATION & TECHNOLOGY

IMFLEX

Most anti-penetration insoles significantly increase the rigidity of boots. Our Bison XT IMFLEX is a NEW innovative Anti-penetration insole with thermo forming technology which significantly improves insole flexibility with the inclusion of flexing ribs allowing the boot to only flex where it should. The material used in Anti-penetration insoles are hard under the heel area of the foot, our Bison XT IMFLEX insoles with new innovation has extra comfort under the heel for better impact absorption with a 2 layer impact foam design.

SDVS™

SDVS™ (Self Dispersing Venting System) is an innovative self venting footbed base with breathable lining, to enhance heat dispersion and reduce moisture.



FOOTWEAR COMPONENTS

LEATHER UPPER
Bison Safety Footwear use a combination of high quality full grain leathers and high quality Nu-Buck leathers.

LEATHER AND SYNTHETIC UPPER
Our Bison Dune Boot uses a combination of Nu-Buck, leather and breathable hard-wearing synthetic to provide more comfort and breathable qualities.

NITRILE RUBBER SOLE
Our Bison XT's and Dune Boots have a high quality Rubber Nitrile sole with a SRC slip rating and heat resistance to 300ºC. Best grip and abrasion resistance guaranteed.

RUBBER SOLE
A lightweight and non marking sole option that is flexible with excellent grip.

TPU SOLE
Lightweight and offers a great abrasion resistance, superior grip and heat resistance to 150ºC.

PU SOLE
Lightweight, flexible, very good abrasion resistance and heat resistance to 150ºC.

RUBBER/NEOPRENE
Our Bison NEOBKO rubber gumboot has a high-quality Neoprene full lining offering great comfort, warmth and a comfortable snug fit.

PVC/NITRILE
The PVC and Nitrile blend on our INCA and MOHAWK gumboots offers a better resistance to a range of chemicals and oils.

SDVS™ FOOTBED
Best compression resistance footbed on the market, air venting channels and great arch support.

TPR TOE SCUFF
Hard wearing toe scuff that extends the life of the boot.

EVA MID-SOLES
An EVA mid-sole offers advantages over many other materials for the same application:
- Light weight compared to PU and Rubber mid-soles
- More flexible than PU and Rubber mid-soles
- Superior impact absorption over PU and Rubber mid-soles
- EVA is totally resistant to Hydrolysis unlike PU.

FOOTWEAR SIZING INFO

FIND THE RIGHT FIT

- Try on new boots around midday. Feet normally swell during the day.
- Walk in new footwear to ensure it is comfortable.
- Boots should have ample toe room (toes should be about 12.5 mm from the front). Do not always expect footwear to stretch with wear.
- Make allowances for extra socks or special arch supports when buying boots. Try on your new boots with the supports or socks you usually wear at work.
- Boots should fit snugly around the heel and ankle when laced.
- Lace up boots fully. High-cut boots provide support against ankle injury.

WHAT ARE E FITTINGS?

EE and EEE are the most common width references used in footwear. Every E present the width increases, 2E (EE) sizes are considered Wide and 3E (EEE) or 4E (EEEE) are Extra Wide. Our Bison XT's standard fit is classed as Extra Wide and our widest fit is classed as 6E (EEEEEE) which is Ultra-Wide.

If you have a unique foot width, our Ultra-Wide fit should be the solution for you. To try our **WIDEST** fit look for the **W** after each size (8W, 9W, 10W, 11W, 12W). Our Bison XT Boot fittings were created with the wider feet of our NZ/AU wearers in mind. Please call your Bison Territory Manager for any assistance.

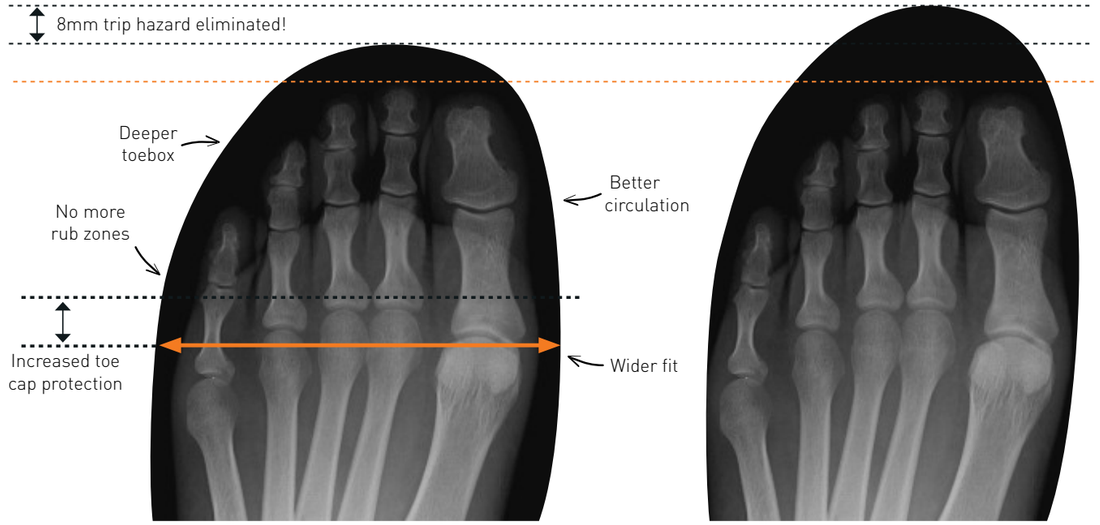
BISON FOOTWEAR

NZ/AU/UK Sizes	4	5	6	7	8	8W	9	9W	10	10W	11	11W	12	12W	13	14
Women's Equivalent Sizes	6	7	8	9	10	10	11	11	12	12	13	13	14	14	15	16
Euro Sizes	37	39	40	41	42	42	43	43	44	44	45	45	46	46	47	48
US Sizes	5	6	7	8	9	9	10	10	11	11	12	12	13	13	14	15
Insole length mm	246.16	254.62	263.08	271.54	280.00	280.00	288.46	288.46	296.92	296.92	305.38	305.38	313.84	313.84	322.30	330.76
Ball Girth mm	246.60	252.95	259.30	265.65	272.00	280.00	278.35	286.35	284.70	292.70	291.05	299.05	297.40	305.40	303.75	310.10
E fitting	EEEE	EEEE	EEEE	EEEE	EEEE	EEEEEE	EEEEE	EEEEEE	EEEEE	EEEEEE	EEEEE	EEEEEE	EEEEE	EEEEEE	EEEEE	EEEEE

HAZARD OF WEARING THE INCORRECT FOOTWEAR

Most people with wide feet often have an issue with proper fitting when their feet don't conform to a standard industry width. Often the only solution is to wear boots 1 or 2 sizes too large to accommodate wider feet.

However, this creates a range of health and safety issues. An oversized boot is a potential trip hazard which may lead to injury or worse. Wearing footwear that is too big also means your toes are no longer sitting in the correct spot for your toecap to be as effective.



30 DAY COMFORT

All BISON XT and Dune Safety Boots come with a 30 day comfort guarantee.
Guaranteed Formidable Protection without compromising comfort!

FOOTWEAR FAQ'S

IS BISON FOOTWEAR CERTIFIED?
Yes, all our safety boots are certified and meet all safety standards AS 2210.3:2019 and EN ISO 20345:2011 and Dielectric ASTM F2413-18 (we can provide certification certificates for all).

DO YOU HAVE BOOTS WITH AN ANTI-PENETRATION INSOLE?
Yes, styles XTLZWHE, XTLZST, XTLZBK, XTZBK, WOLFBK and GRIZZLYBK.

DO YOU HAVE BOOTS THAT ARE ELECTRIC HAZARD RESISTANT (EH)?
Yes, styles XTLZWHE, XTLZST, XTLZBK, XTZBK, DUNEBK and DUNEBR.

WHY DO I NEED TOE CAP PROTECTION?
All Bison Safety Boots comes with toe cap protection in compliance to AS 2210.3:2019. Bison toe caps, either steel or composite are a protective reinforcement at the end of work boots to prevent injury to the toes from falling objects. In most workplaces having toe cap protection in your safety boots is compulsory.

SHOULD I WEAR A SLIP ON OR LACE UP?
Slip on gusset boots are very good if you need to take off your boots regularly but do not provide any ankle roll protection, many construction sites do not allow slip on boots. Lace up boots have ankle roll protection and now with the zip side option are also very good if you need to take off your boots regularly.

HOW LONG SHOULD SAFETY BOOTS LAST?
It is generally accepted that a pair of safety work boots should last from 3 to 12 months, but this depends on many factors i.e. occupation, exposure to harsh chemicals, environment wet and muddy, person weight, work hours per day/week.

WHAT ARE THE TELL-TALE SIGNS I NEED TO REPLACE MY SAFETY BOOTS?
Loss of sole tread and grip, delamination of sole and/or upper components, exposed safety toe caps, loss and/or damaged fixing eyelets.

ARE SAFETY BOOTS WATERPROOF?
Unless stated generally no, most safety boots may state water resistant but this is not the same as waterproof. Genuine water proof boots are specifically made and more expensive. Our Bison boot range are water resistant for short term exposure to moisture.

I SEE THE INCA AND MOHAWK GUMBOOTS HAVE CUT OFF RINGS – WHAT IS BEST TO USE TO CUT THESE?
A sharp Stanley knife or a large pair of quality scissors.

WHAT WARRANTIES DOES BISON FOOTWEAR HAVE?
For warranty info please visit our website:
www.paramountsafety.co.nz/warranties

FOOTWEAR CARE

CLEANING
To ensure the best service and wear from footwear, it is important that the footwear is regularly cleaned and treated with a good proprietary cleaning product. Do not use caustic cleaning agents. Where footwear is subjected to wet conditions, it shall, after use, be allowed to dry naturally in a cool, dry area and not force dried as this can cause deterioration of the upper material. This footwear has been successfully tested against PM144 for slip resistance. Please be aware, slippage may still occur in certain environments.

WEARLIFE
If the footwear is cared for and worn in the correct working environment and stored in dry ventilated conditions, it should give a good wear life, without premature failure of the outsole, upper and upper stitching. The actual wear life for footwear is dependant on the type of footwear, environmental conditions which can affect the wear, contamination and degradation of the product.

PROTECT YOUR BOOTS FROM HYDROLYSIS
Hydrolysis is a normal material aging process that occurs in all footwear with a cushioned PU midsole. Hydrolysis is not visible from the outside so a few of the tips below can help protect your boots from hydrolysis:

- Store your boots in a dark, dry and well-ventilated area.
- Keep your boots away from sources of excessive heat.
- Clean your boots regularly. Wash off muck and manure with water at the end of each day.

THE RIGHT FIT

THERE'S WIDE - THEN THERE'S XT WIDE

The Fit (last) on our Bison XT Boots was created with the wider feet of our NZ/AU wearers in mind.

Our market research showed boot wearers with wide feet were wearing boots 2-3 times larger to accommodate their width. Wearing larger sized boots to accommodate width meant wearers were working in boots about 25mm too long for the length of their foot. This compromises safety and protection as the toes are no longer in the correct place for the protection of the toe cap. This also creates a real trip hazard by wearing boots that are too long for your foot (think clown shoes).

Our standard Bison XT boots are classed as an Extra Wide fit when compared to other standard footwear. We then went one step further and developed an Ultra-Wide fit - our WIDEST fitting boot! So now those with wide feet can wear a safer boot with the correct length and width.

To try our WIDEST fit look for the W after each size (8W, 9W, 10W, 11W, 12W). Get the Bison XT FIT!

FOOTWEAR

4X4 GRIP

BISON XT GRIP FOR ALL SURFACES

Our Bison XT's have a unique 4x4 multi-directional tread pattern that provides positive grip in all directions.

The Bison Nitrile Rubber compound has been designed to give maximum grip in both wet and dry conditions, has greater resistance to a range of chemicals as well as having a 300°C heat resistant rating. To add to this safety our Bison XT's have an SRC slip rating - the highest possible under the safety standards.

We believe our XT Safety Boots have the best sole on the market!

FOOTWEAR

CHOOSE COMFORT

ENHANCED LONG-TERM CUSHIONING

With workers taking on average 10,000 steps per work day, comfort is critical in our Bison XT Safety Boots. For internal comfort our Bison XT's have no seams in the heel lining which cause rub zones/blisters in many other boots.

Comfort is enhanced with our SDVS (Self-Dispersing Venting System) footbed. The Bison SDVS footbed has venting channels to maintain airflow, has shock absorbing heel and forefoot pads and an athletic arch support. The XT footbeds provide exceptional compression resistant cushioning and improve foot-sole support/comfort for the life of the boot.

Our Bison XT's also have a game changing IMFLEX Anti-penetration insole with flexing ridges that allows the material to flex exactly where the foot does (rather than standard anti-penetration midsoles that are rigid and don't allow flex).

FOOTWEAR

FOOTWEAR
SAFETY BOOTS - ZIP SIDE

AS 2210.3:2019
Lic. BMP 708413

EN ISO 20345.2011
Lic. BMP 708414

COMFORT 30 DAY GUARANTEE

XTLZ XT ZIP SIDE/LACE UP SAFETY BOOT

Standards: Certified to AS 2210.3:2019 Lic. BMP 708413 and EN ISO 20345:2011 Lic. BMP 708414. Class 1 SBP, SRC, FO. (EH) ASTM F2413-18.

- Tested and compliant to ASTM F2412-18(18kV) EH - Electrical Hazard Resistance
- Extra Wide standard and Ultra-Wide (W) fit minimises trip hazards, eliminates rub-zones and maximises surface area grip
- Bison Grip nitrile rubber out-sole compound and multi-directional tread design
- Anti-penetration IMFLEX insole
- Lighter weight EVA midsole for better flex and impact absorption
- Ergonomic rocker bottom sole aids forward motion, reduces wearer fatigue, and reduces risk of toe trip and heel strike slips
- Nitrile rubber outsole offers extreme protection up to 300°C
- Innovative self venting footbed base - SDVS and breathable lining, combine to enhance heat dispersion and reduce moisture
- Moulded footbed compound, with athletic arch support, provides compression resistant cushioning and improved support

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Upper:** Leather / **Sole:** Nitrile Rubber
- **Colour:** XTLZWHE (Wheat), XTLZST (Stone), XTLZBK (Black) / **Sizes:** 4-14 / **Ultra-Wide (W) Sizes:** 8W, 9W, 10W, 11W, 12W

IMFLEX SDVS™

AS 2210.3:2019
Lic. BMP 708413

EN ISO 20345.2011
Lic. BMP 708414

COMFORT 30 DAY GUARANTEE

XTZBK XT HIGH LEG ZIP SIDE/LACE UP SAFETY BOOT

Standards: Certified to AS 2210.3:2019 Lic. BMP 708413 and EN ISO 20345:2011 Lic. BMP 708414. Class 1 SBP, SRC, FO. (EH) ASTM F2413-18.

- Tested and compliant to ASTM F2412-18(18kV) EH - Electrical Hazard Resistance
- Extra Wide and Ultra-Wide (W) fit minimises trip hazards, eliminates rub-zones and maximises surface area grip
- Bison Grip nitrile rubber out-sole compound and multi-directional tread design
- Anti-penetration IMFLEX insole
- Lighter weight EVA midsole for better flex and impact absorption
- Ergonomic rocker bottom sole aids forward motion, reduces wearer fatigue, and reduces risk of toe trip and heel strike slips
- Nitrile rubber outsole offers extreme protection up to 300°C
- Innovative self venting footbed base - SDVS and breathable lining, combine to enhance heat dispersion and reduce moisture
- Moulded footbed compound, with athletic arch support, provides compression resistant cushioning and improved support

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Upper:** Leather / **Sole:** Nitrile Rubber
- **Colour:** Black / **Sizes:** 4-14 / **Ultra-Wide (W) Sizes:** 8W, 9W, 10W, 11W, 12W / **Old Code:** XTZ-100

AS 2210 | EN ISO 20345 | SB | SB P | SRC | EH | WIDE FIT

SDVS™

AS 2210.3:2019
Lic. BMP 708413

EN ISO 20345.2011
Lic. BMP 708414

TORBK TOR ZIP SIDE/LACE UP SAFETY BOOT

Standards: Certified to AS 2210.3:2019 Lic. BMP 708413 and EN ISO 20345:2011 Lic. BMP 708414. SB, SRB, FO.

- Wide fit sole sizing minimises trip hazards, eliminates rub-zones and maximises surface area grip
- Hard wearing TPU sole offers a good resistance to a range of chemicals and superb grip
- Innovative SDVS (Self Dispersing Venting System) footbed base
- Anti-hydrolysis PU midsole and TPU outsole offer impact absorption and the proven abrasion resistance of a TPU outsole
- Steel toe cap

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Upper:** Leather / **Sole:** PU/TPU
- **Colour:** Black / **Sizes:** 5-14

AS 2210 | EN ISO 20345 | SB | SRB | 150°

SDVS™

AS 2210.3:2019
Lic. BMP 708413

EN ISO 20345.2011
Lic. BMP 708414

COMFORT 30 DAY GUARANTEE

DUNE LOW CUT ZIP SIDE/LACE UP SAFETY BOOT

Standards: Certified to AS 2210.3:2019. BMP 708414 LIC. EN ISO 20345:2011 Class 1 SB, SRC, FO. (EH) ASTM F2413-18.

- Certified to the ASTM standard for EH - Electrical Hazard resistance
- Breathable, synthetic and leather upper with ergonomic zip and lace combination
- Nitrile rubber sole with best SRC slip rating
- 300°C outsole rating
- EVA midsole: lighter, more flexible and better impact absorption
- Wide fit sole sizing minimises trip hazards
- Innovative self venting footbed base - SDVS and breathable lining, combine to enhance heat dispersion and reduce moisture
- Moulded footbed compound, with athletic arch support, provides compression resistant cushioning and improved support
- Additional toe guard helps extend the life of the boots
- Non-marking sole
- Steel toe cap

- **Industries:** Roofing, Rigging, Construction & Trades, Infrastructure & Roading, Manufacturing
- **Upper:** Leather and Synthetic / **Sole:** Nitrile Rubber
- **Colour:** DUNEBK (Black), DUNEBR (Brown) / **Sizes:** 5-13

AS 2210 | EN ISO 20345 | SB | SRC | EH | 300°

SDVS™

FOOTWEAR

AS 2210.3:2019
Lic. BMP 744486

EN ISO 20345.2011
Lic. BMP 744659

WOLFBK WOLF LACE UP SAFETY BOOT

Standards: Certified to AS 2210.3:2019, EN ISO 20345:2011 SB P, FO, SRB.

- Diamond tread ladder grip with Tunnel Tread Technology sole to expel water and increase stability and grip
- TPU ankle and heel support to minimise the risk of ankle roll
- Steel toe cap, Anti-penetration midsole
- Keep cool with the breathable, moisture wicking lining

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Upper:** Leather / **Sole:** PU/TPU
- **Colour:** Black / **Sizes:** 5-12 / **Old Code:** BISON11SBP

AS 2210 · EN ISO 20345 · SB · SB P · SRB · 150°

AS 2210.3:2019
Lic. BMP 744486

EN ISO 20345.2011
Lic. BMP 744659

DUTYBK DUTY LACE UP SAFETY BOOT

Standards: Certified to AS 2210.3:2019, EN ISO 20345:2011. S1, FO, SRC.

- Complies to Anti-Static Footwear
- Ladder grip for safe footing up ladders
- Additional comfort with the low density PU midsole
- Shock absorber for heel invigoration
- Steel toe cap

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Food Industry
- **Upper:** Leather / **Sole:** PU
- **Colour:** Black / **Sizes:** 5-12 / **Old Code:** BISON01

AS 2210 · EN ISO 20345 · S1 · SRC · 150°

AS 2210.3:2019
Lic. BMP 744486

EN ISO 20345.2011
Lic. BMP 744659

GRIZZLYBK GRIZZLY SLIP ON SAFETY BOOT

Standards: Certified to AS 2210.3:2019, EN ISO 20345:2011. SB P, SRB, FO.

- Hard wearing scuff cap to increase boot life
- Diamond tread ladder grip with Tunnel Tread Technology sole to expel water and increase stability and grip
- TPU ankle and heel support to minimise the risk of ankle roll
- Steel toe cap, Anti-penetration midsole

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Upper:** Leather / **Sole:** PU/TPU
- **Colour:** Black / **Sizes:** 5-12 / **Old Code:** BISON10SBP

AS 2210 · EN ISO 20345 · SB · SB P · SRB · 150°

AS 2210.3:2019
Lic. BMP 744486

EN ISO 20345.2011
Lic. BMP 744659

TRADEBK TRADE SLIP ON SAFETY BOOT

Standards: Certified to AS 2210.3:2019 and EN ISO 20345:2011. SB, SRC

- Complies to Anti-Static Footwear
- Oil resistant anti slip sole
- Additional comfort with the low density PU midsole
- Shock absorber for heel invigoration
- Steel toe cap

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Food Industry
- **Upper:** Leather / **Sole:** PU
- **Colour:** Black / **Sizes:** 4-12 / **Old Code:** BISON00

AS 2210 · EN ISO 20345 · S1 · SRC · 150°

AS 2210.3:2019
Lic. BMP 708413

EN ISO 20345.2011
Lic. BMP 708414

RIDGECT RIDGE SLIP ON SAFETY BOOT

Standards: Certified to AS 2210.3:2019 Lic. BMP 708413 and EN ISO 20345:2011 Lic. BMP 708414. SB, SRB, FO.

- Wide fit sole sizing minimises trip hazards, eliminates rub-zones and maximises surface area grip
- Hard wearing TPU sole offers good resistance to a range of chemicals and superb grip
- Steel toe cap
- Innovative SDVS (Self Dispersing Venting System) footbed base
- Moulded footbed for comfort
- Anti-hydrolysis PU midsole and TPU outsole offer impact absorption and proven TPU abrasion resistance
- Easy on and off with reinforced elastic side gussets

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Upper:** Leather / **Sole:** PU/TPU
- **Colour:** Chestnut / **Sizes:** 4-14

AS 2210 · EN ISO 20345 · SB · SRB · 150° · SDVS™

NEOBKO NEO RUBBER/NEOPRENE SAFETY GUMBOOT

Standards: Certified to AS 2210.3:2019 and EN ISO 20345:2011 SB, SRC.

- Unique blend of neoprene and high density rubber
- Neoprene liner for warmth and insulation
- Excellent seal against leg
- Easy insert pull tag for quick foot insertion
- Specially contoured midsole
- Innovative multi-directional cleats
- Easy exit spur for quick removal
- Oil and fuel resistant high density sole
- Comfortable, thermal-lined 200 joule safety toe cap

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Mining, Manufacturing
- **Material:** Rubber/Neoprene
- **Colour:** Black/Orange / **Sizes:** 6-13

TSOCKGYB BLUETOP WOOL SOCKS

- Ribbed elasticised top to prevent the sock slipping down
- Reinforced heel and achilles for extra wear
- High density terry pad in heel and toe for added comfort and wear
- 'Y' heel for fit and added comfort
- Elastic heel and arch support for comfort and to prevent socks slipping down
- 'No ridge' technically advanced toe closure for comfort

- **Industries:** All Industries
- **Fabric:** 80% New Zealand Wool, 20% Nylon
- **Colour:** Assorted stripes / **Sizes:** 3-5, 6-8, 9-10, 11-12, 13-14 / **Old Code:** TBTTS

BSBK BAMBOO SOCKS

- Comfort cuff
- Anatomical ankle and arch support
- Thermo-Regulation: assists feet to stay warm or cool
- Moisture Wicking: superior absorption helps keep your feet dry
- Odour Control: Bamboo has anti-bacterial properties
- Anti-Static: Bamboo is a naturally anti-static fibre
- Eco Friendly: Bamboo requires minimal water and no pesticides

- **Industries:** All Industries
- **Fabric:** Bamboo fibre
- **Colour:** Black / **Sizes:** Men 6-10 (Women 7-11), Men 11-14 (Women 12-15)

INCAGSBKGY INCA PVC/NITRILE SAFETY GUMBOOT

Standards: Complies to AS 2210.3:2019 and EN ISO 20345:2011 SB, SRC.

- Flexible composition makes this gumboot resistant to cracking
- Steel toe cap, Arch support for increased comfort
- Cleat pattern design for maximum traction and self-cleaning
- Resistant to animal fats, oil and acids

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Manufacturing, Food Industry
- **Material:** Heavy duty PVC/Nitrile upper and outsole
- **Colour:** Black/Grey / **Sizes:** 4-14 & 16 / **Old Code:** INCAGS

MOHAWK MOHAWK PVC/NITRILE FOOD INDUSTRY SAFETY GUMBOOT

Standards: Complies to AS 2210.3:2019 and EN ISO 20345:2011 SB, SRC.

- Sole resistant to solvents, oil, acid, alkalis and fats
- Steel toe cap, reinforced ankle, heel and instep for optimum support
- Superior slip resistant sole with cleat pattern designed for traction
- Cut off rings for personalised fit

- **Industries:** Manufacturing, Food Industry
- **Material:** Heavy duty PVC/Nitrile upper and outsole
- **Colour:** MOHAWKWGY (White/Grey), MOHAWKWY (White/Yellow) **Sizes:** 4-14 & 16 / **Old Code:** MOHAWKSGSX

FBBK FOOTBED FOR BISON BOOTS

- Moulded footbed and a special formulated compound, with athletic arch support
- Developed to resist compression in use and maintain continued impact absorption for the life of the boot
- Innovative self-venting footbed (SDVS: Self Dispersing Venting System) enhances heat dispersion and reduces moisture (sweat)

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Oil & Gas, Mining, Manufacturing
- **Material:** PU
- **Colour:** Black / **Sizes:** 4-14 / **Old Code:** XTFBSS

SDVS™

XTLACEBKGY XT FOOTWEAR BOOTLACES

- DTY Nylon one of the most durable laces
- 5mm diameter
- Thicker means more tangle-resistant
- No frey laces
- Resistant to chemicals, mud and abrasion from daily use

- **Industries:** Construction & Trades, Infrastructure & Roading, Agriculture & Forestry, Oil & Gas, Mining, Manufacturing
- **Material:** DTY Nylon
- **Colour:** Black/Grey / **Sizes:** 4-8 (157cm), 9-14 (182cm)