RADIATION HAT WITH VELCRO

LEAD WEARABLE

ABOUT US



Phillips Safety is a recognized leader in radiation protection, designing and manufacturing high-quality radiation safety products and specialized PPE. Family-owned and operated for over 100 years, we are known for precision manufacturing, technical expertise, and an unwavering commitment to protecting professionals working in high-risk environments.

Our leadership in radiation safety began with protective eyewear and has expanded to a comprehensive portfolio of radiation apparel, barriers, shielding drapes, and custom solutions used in medical, industrial, research, and veterinary settings. Today, Phillips Safety products are trusted in fluoroscopy suites, cath labs, operating rooms, radiology departments, and interventional environments worldwide.

At the core of our radiation apparel is Axion Core™ technology—advanced lead-free and low-lead composite materials engineered to provide dependable radiation attenuation with reduced weight and improved comfort. Available in Axion Core 1000, 2000, and 3000, these core options are designed to balance protection, durability, and ergonomics to meet the needs of a wide range of users.

All Phillips Safety products are manufactured to meet applicable safety and regulatory standards, including Regulation (EU) 2016/425, and are tested in accordance with EN 61331 standards. Through vertical integration and in-house expertise, Phillips Safety continues to deliver reliable, innovative radiation protection solutions professionals can trust.

PHILLIPS SAFETY LEAD APRONS

CONTENT

01. Phillips Safety Lead Aprons
Learn about our core materials, Axion Core™ technology, QuickShip options, and more.

02. Lead Wearable Style
Explore our wearable style, sizing options, and measurement guidance, if applicable.

03. Fabric Materials, Colors & Swatches
Discover available fabrics, colors, patterns, and customization options.



OUR LEAD APRONS

At Phillips Safety, our lead aprons are meticulously crafted in the USA with the wearer's comfort, protection, and style in mind, providing an ideal balance of weight and functionality.

Our aprons use top-quality barrier material that excels in both hygiene and comfort, making it the best choice on the market. This advanced barrier provides additional protection, as the inner and outer materials prevent pathogens, liquids, and solid particles from reaching the body.

While our QuickShip aprons ship within 24 hours, custom aprons are available and typically ship in 2-5 business days. Custom aprons can be tailored to your exact measurements and preferences, providing an ideal fit and optimal protection.

QuickShip Aprons and Garments

Phillips Safety offers a line of QuickShip aprons and garments. These products come in 0.5mm Pb Lead Equivalency in our Lightweight Lead and Axion Core™ 2000 cores. Standard colors in both Nylon and Ripstop fabrics allow for a shipping time within 24 hours.

PHILLIPS SAFETY LEAD APRONS

Axion Core Lead-Free Radiation Aprons and Garments

Phillips Safety introduces Axion Core™, our next-generation line of lead-free radiation aprons and garments.

By leveraging new advancements in manufacturing technology, Axion Core delivers the lightest weight core on the market today—without compromising shielding performance or safety. We have developed three distinct core options—Axion Core 1000, 2000, and 3000—each engineered with a unique blend of bismuth, antimony, and rare earth elements.

These innovative lead-free solutions vary in weight to meet different user needs but never sacrifice protection, giving medical professionals the perfect balance of comfort, durability, and performance while ensuring the highest safety standards in radiation shielding.

Axion Core™ 1000

The most economical lead-free core in our lineup, Axion Core 1000 is also the heaviest of our non-lead options. Designed for facilities prioritizing cost-efficiency without sacrificing safety, it offers reliable protection at a value price point. At roughly 5% lighter than traditional lightweight lead cores on the market, it delivers measurable weight reduction while maintaining full compliance with radiation shielding standards.

Axion Core™ 2000

Our most popular core, Axion Core 2000 delivers a significant weight reduction compared to both traditional lead aprons and the Axion Core 1000. Offering the ideal balance of performance and value, this core is price-effective while providing the comfort needed for those who wear aprons for extended periods of time.

Axion Core™ 3000

The lightest core in our lineup, Axion Core 3000 represents a true engineering achievement. At 15-20% lighter than Axion Core 2000, this is one of the lightest lead-free cores on the market today, if not the lightest. This material allows us to deliver the lightest apron available in the Phillips Safety line, giving medical professionals the most comfort during long procedures. For those seeking the perfect combination of lightweight design and long-term durability, Axion Core 3000 is simply unmatched.

Lightweight Lead

Our Lightweight Lead Core is a specially formulated material engineered to reduce weight compared to standard, traditional lead cores—making it easier and more comfortable to wear without sacrificing dependable protection. While it's not as light as our Axion Core lead-free options, this formulation provides an excellent balance of affordability, performance, and reliability. A great price point and proven shielding performance make it a trusted choice for facilities seeking consistent protection with a lighter feel than conventional lead aprons.

RADIATION HAT WITH VELCRO

RA-RH







The Radiation Hat with Velcro Closure provides dependable protection against scattered radiation in medical and industrial environments. Designed for comfort during extended wear, it features an adjustable Velcro closure that ensures a secure, comfortable fit. The hat is available in four core protective materials—Lightweight Lead, Axion Core™ 1000, Axion Core™ 2000, and Axion Core™ 3000—with lead equivalencies of 0.25mm Pb, 0.35mm Pb, or 0.50mm Pb to suit varying protection needs.

This Radiation Hat is offered in five standard sizes, ranging from Small to 2XL, with custom sizing available. It can be manufactured with your choice of four outer materials—Nylon, Ripstop, Polytron, or PVC EasyClean—and is available in a wide range of colors and binding options.

2-Year Warranty – Radiation protection apparel is covered against manufacturing defects.

AVAILABLE OPTIONS

CORE MATERIAL	LEAD EQUIVALENCY	OUTER FABRIC
Axion Core™ 1000, 2000, 3000, Lightweight Lead	0.25mm Pb, 0.35mm Pb, 0.50mm Pb	Nylon, Ripstop, Polytron, PVC EasyClean

RADIATION HAT WITH VELCRO

SIZING CHART

UNISEX

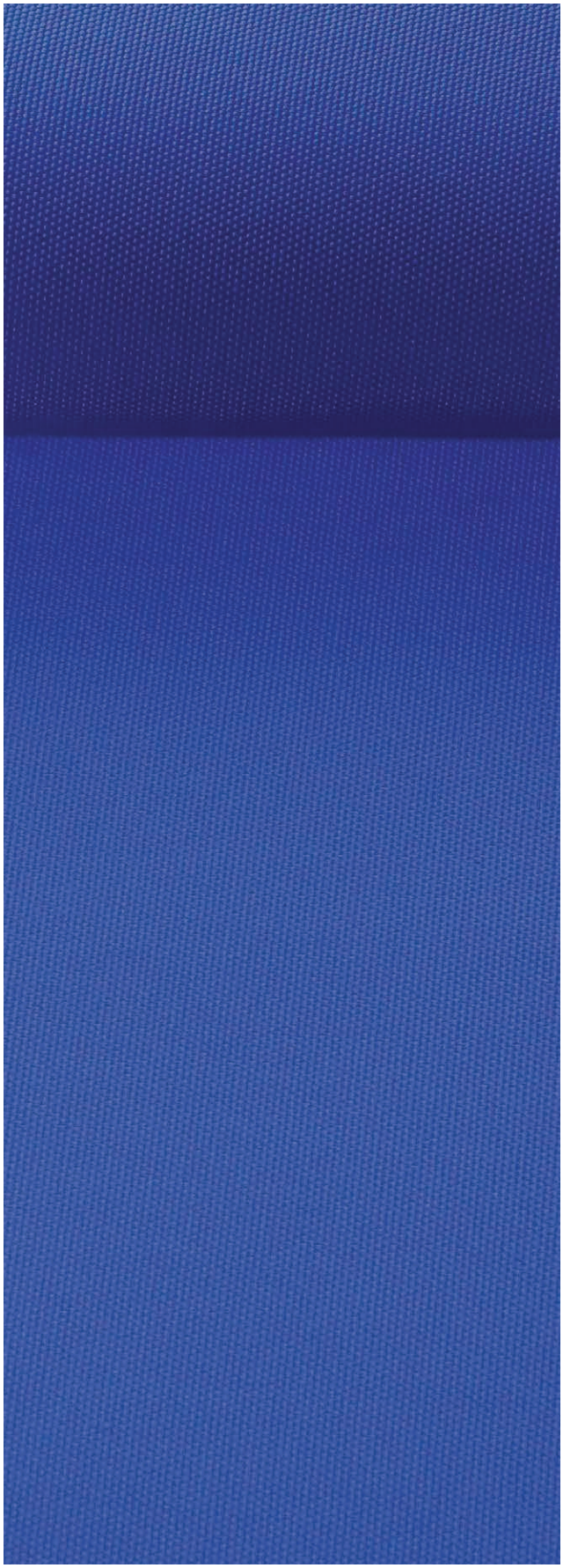
SIZE	Circumference
Small	21″
Medium	22″
Large	23″
XL	24″
2XL	25″

Please note: Sizes below Small and above 2XL can be accommodated with custom sizing.

FABRIC MATERIALS, COLORS & SWATCHES

NYLON

A classic lightweight fabric, Nylon is a synthethic material with high tenacity and excellent abrasion resistance. Nylon is also highly resilient, has good specific strength and provides high resistence to insects, fungi, molds, mildew, rot, and many chemicals.



EXTREMELY RESISTANT

LIGHTWEIGHT

STRONG & DURABLE

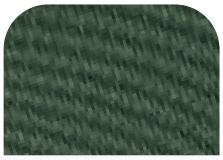
MULTIPLE OPTIONS

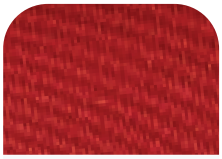
NYLON

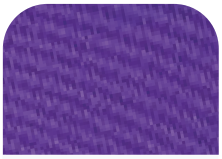
AVAILABLE COLORS & PATTERNS


ROYAL BLUE


BLACK


HUNTER GREEN


RED


PURPLE


PINK


BURGUNDY


CHARCOAL


DARK BROWN


FLUORESCENT ORANGE


GOLD


NAVY BLUE


TURQUOISE


MEDIUM BLUE


SILVER


KELLY GREEN


TEAL


COLOR FOSSILS


FISH BONES


SHARKS


FLAMINGO


ORANGE HIBISCUS


HAWAIIAN FLOWERS


TROPICAL AVOCADO


PURPLE PLAID

BINDING AVAILABLE


BLACK | ROYAL BLUE | HUNTER GREEN | RED | PURPLE | PINK | BURGUNDY | CHARCOAL | DARK BROWN


FLUORESCENT ORANGE | GOLD | NAVY BLUE | TURQUOISE | MEDIUM BLUE | SILVER | KELLY GREEN | TEAL

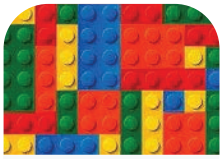
NYLON

AVAILABLE COLORS & PATTERNS


HEART GRAFFITI


PINK PAISLEY

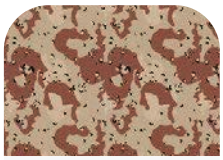

CACTUS


DOT BLOCKS


DIGI CAMO WOODLAND GREEN


NAVY CAMO


MD CAMO


DESERT CAMO


PINK CAMO

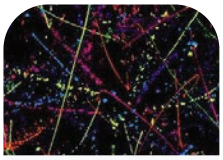

DIGI CAMO GRAY/BLACK


CHEETAH


ANIMAL BLUE PRINT


LEOPARD PINK


WHITE DOTS ON PINK


PAINT SPLATTER


SUGAR SKULLS


SKULLS


OCEAN


SUPERHERO KIDS


DENTAL


CATS


DOGS

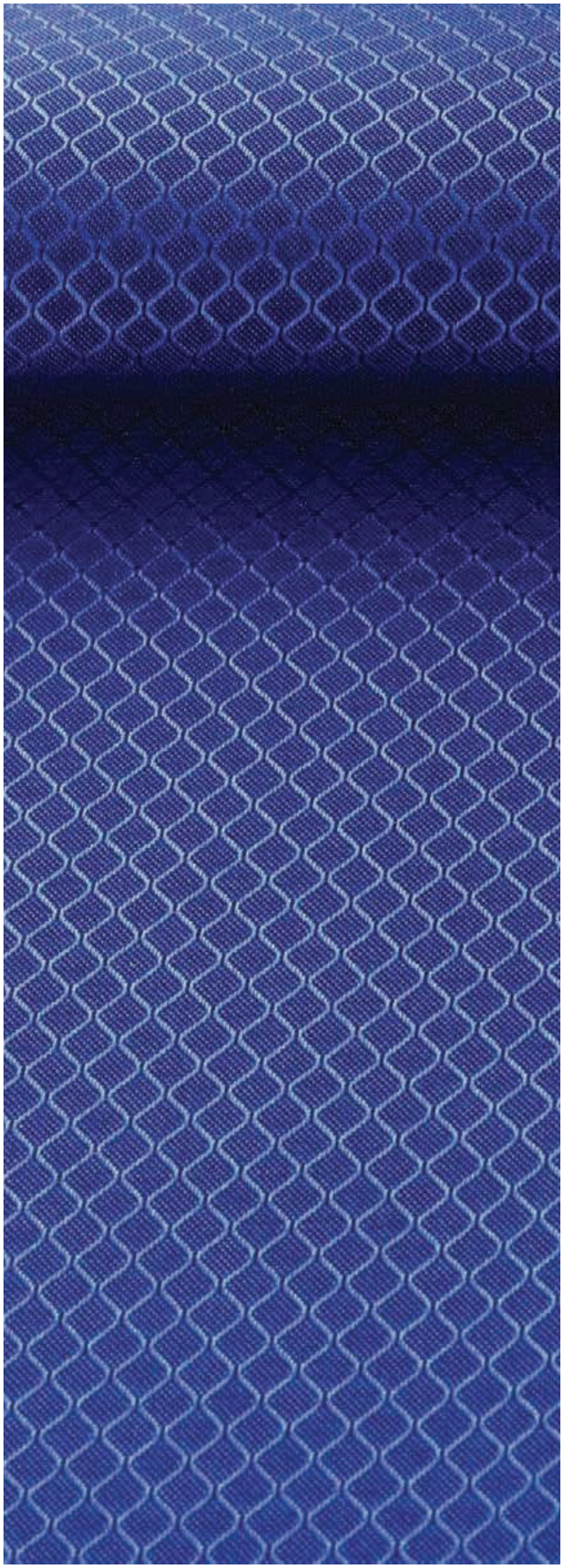
BINDING AVAILABLE

BLACK | ROYAL BLUE | HUNTER GREEN | RED | PURPLE | PINK | BURGUNDY | CHARCOAL | DARK BROWN

FLUORESCENT ORANGE | GOLD | NAVY BLUE | TURQUOISE | MEDIUM BLUE | SILVER | KELLY GREEN | TEAL

RIPSTOP

Ripstop is a woven fabric that uses a reinforcing technique which makes it more resistant to tearing and ripping. Often made of Nylon, Ripstop is a lightweight material with interwoven ripstop reinforcement threads in a crosshatch pattern, making it look like diamong stitching.



EXTREMELY RESISTANT

LIGHTWEIGHT

STRONG & DURABLE

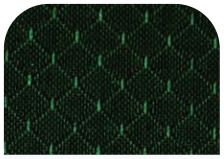
DIAMOND STITCHING

RIPSTOP

AVAILABLE COLORS & PATTERNS


ROYAL BLUE


BLACK


KELLY GREEN


HUNTER GREEN


RED


CINNAMON


TAN


LIGHT GRAY


PURPLE

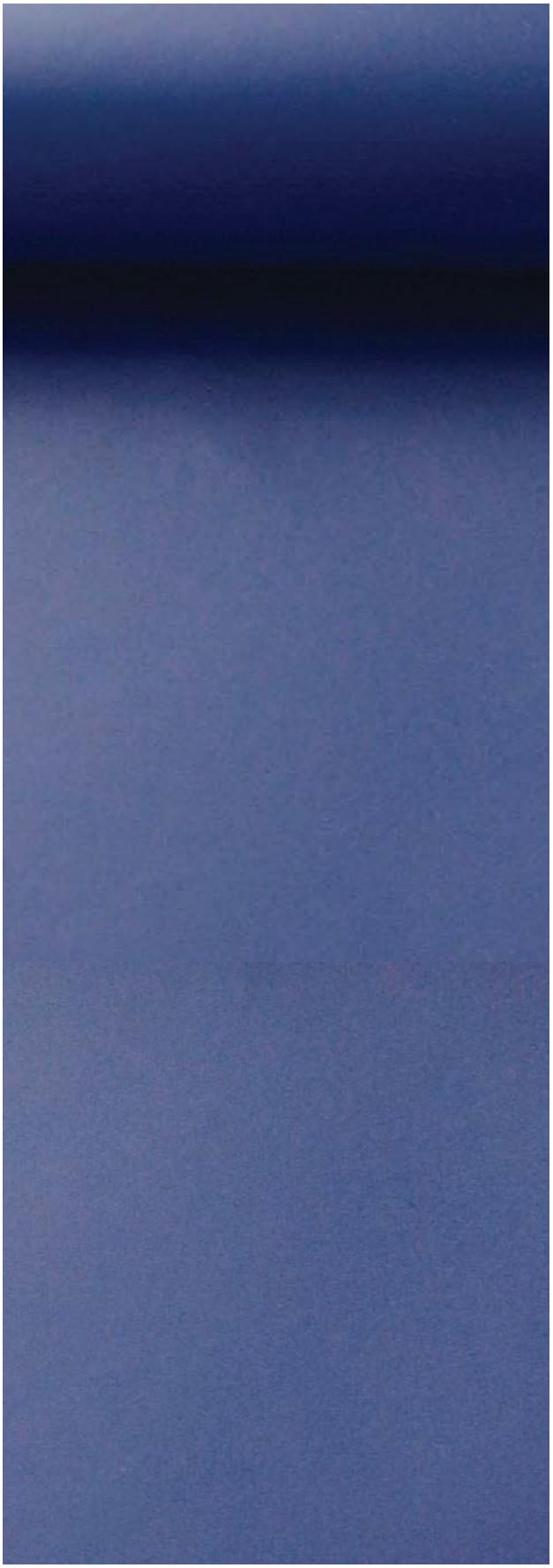
BINDING AVAILABLE


BLACK, ROYAL BLUE, HUNTER GREEN, RED, PURPLE, PINK, BURGUNDY, CHARCOAL, DARK BROWN


FLUORESCENT ORANGE, GOLD, NAVY BLUE, TURQUOISE, MEDIUM BLUE, SILVER, KELLY GREEN, TEAL

PVC EASYCLEAN

PVC EasyClean is a thick fabric that provides a leather-like touch. Made of an ultra resistant material, it is – as the name suggests – very easy to clean: with a quick wipe it is clean and ready to go.



- EASY CLEAN
- LIGHTWEIGHT
- STRONG & DURABLE
- EXTREMELY RESISTANT
- LEATHER TOUCH

PVC EASYCLEAN

AVAILABLE COLORS & PATTERNS

PVC FABRIC IS BEING PHASED OUT

Color availability is limited
and subject to confirmation


CYAN


PINK


PURPLE


RED


PIRATE


CAMO


PLANETS


LEOPARD

BINDING AVAILABLE


BLACK, ROYAL BLUE, HUNTER GREEN, RED, PURPLE, PINK, BURGUNDY, CHARCOAL, DARK BROWN


FLUORESCENT ORANGE, GOLD, NAVY BLUE, TURQUOISE, MEDIUM BLUE, SILVER, KELLY GREEN, TEAL

POLYTRON

Polytron is a smooth fabric with a soft touch. Manufactured in the U.S., it has flexible and comfortable qualities due to the Polypropylene it is made of. This lightweight materials is also inherently stain resistant, PFC chemical free, and bleach cleanable.



- FLEXIBLE & COMFORTABLE
- LIGHTWEIGHT
- STRONG & DURABLE
- EXTREMELY RESISTANT
- SOFT TOUCH

POLYTRON

AVAILABLE COLORS & PATTERNS


ROYAL BLUE


BLACK


GREEN


PURPLE


RED


PINK


GRAY


LIGHT BLUE


MEDIUM BLUE


NAVY BLUE

BINDING AVAILABLE


BLACK, ROYAL BLUE, HUNTER GREEN, RED, PURPLE, PINK, BURGUNDY, CHARCOAL, DARK BROWN


FLUORESCENT ORANGE, GOLD, NAVY BLUE, TURQUOISE, MEDIUM BLUE, SILVER, KELLY GREEN, TEAL