2025

PROTECH

MEDICAL

Radiation Safety Apparel and Shielding

Made in the USA since 1994





# **ABOUT PROTECH**

# MANUFACTURER INFO

#### **FDA Listing**

OWNER/OPERATOR #: 10025412

FDA LISTING NUMBER: D048258

PRODUCT CODE: IWO
DEVICE CLASS: #1

**REGULATION #:** 892.6500 **OSHA REGULATION:** 1910.1096

#### **Quality System**

ISO 9001:2015 EU/UKCA 2016/425, MODULE D, B



#### COMPLIANCE

Protech has expertly crafted radiation protective garments for over 20 years. Our extensive product knowledge incorporates high-quality control systems as well as comprehensive regulatory testing.

**IEC 61331-1:2014: (EU)** Protective devices against Diagnostic Medical X-ray radiation. (Determination of attenuation properties of material)

**IEC 61331–3:2014: (EU)** Protective devices against diagnostic medical X-radiation Part 3: Protective clothing, Eyewear and Protective Patient shields.

**ASTM 2547–18: (USA)** Standard test method for determining the attenuation properties in a primary x-ray beam of materials used against radiation.







# WE ARE A FAMILY JUST LIKE YOURS. COMMITTED TO MANUFACTURING IN THE USA AND SOURCING LOCALLY.

Protech is a family-owned and operated manufacturer of high-quality radiation protective apparel in South Florida. We continue to innovate stylish and light-weight products all while maintaining our commitment to quality. Protech's customer-driven focus is backed by a comprehensive product portfolio and world-class customer service.

Thanks to your support, this small family business has become a global leader in radiation safety.

Our Italian heritage means one thing: it doesn't matter if you were born into our family, your support is all that matters. When you wear our product, you support many Protech families just like yours.

Together, we are family.

#### OUR MISSION STATEMENT

Our mission is to keep you safe by reducing your exposure to ionizing radiation and its harmful effects while offering innovative, lightweight and stylish solutions. The Protech team is a dedicated group of professionals that takes great pride in its work.

Our entire team understands the importance of the products we manufacture and how they contribute to your wellbeing. By focusing on our core principles (Quality, Integrity and Service) we are able to offer high-quality, more protective products.

Protech's passion is, and will always be, your safety.





# WE ALL HAVE TO START SOMEWHERE. OUR SOMEWHERE BEGAN IN **1986**, WITH RON & LEAD-ED EYEWEAR.

In 1986, Ronald Parasmo, a licensed optician in the state of Florida, was approached with an unusual request to repair leaded eyewear. The glasses belonged to a doctor and were used as protection against ionizing radiation. Ron quickly found the required materials to fix the eyewear and the gentleman who sent Ron the eyewear was so impressed with the quality of his work that he began referring additional jobs.

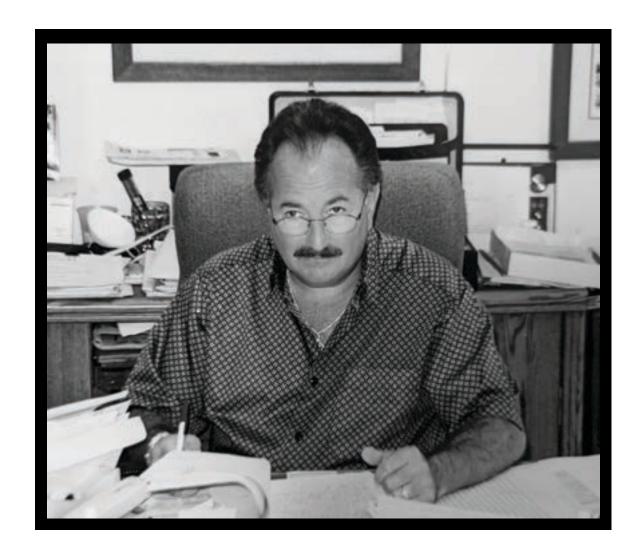
As repairs on lead glasses grew, Ron launched his own line of radiation protective eyewear and in 1994, Protech Leaded Eyewear was incorporated. In 1997, Protech developed one of the most popular gloves on the market today; the FDA 510k approved ProGuard radiation reducing gloves for fluoroscopic procedures.

In the early 2000s, with the success of gloves and eyewear inspiring further growth, Protech set out on a mission to become the one-stop-shop for radiation protection apparel by introducing its own line of high quality, light weight aprons. Through the efforts of many great employees, the apron business took root and Protech completed its transition from market disruptor to a mature, full-scale radiation apparel manufacturer.

In 2014, Ron's son Jarrod joined Protech's team to modernize and revitalize the business with the introduction of new products and technologies. Joining Jarrod in 2016 was his longtime partner, Rachael. Together, Rachael and Jarrod have continued Protech's proud tradition of innovation and expanded the Protech family into over 50 countries.

Today, Protech is one of the most recognized manufacturers of radiation safety products in the world; known for its quality, service, and integrity.





IN LOVING MEMORY

# RON PARASMO

Sept. 1, 1953 - Jan. 22, 2022

APRONS		Pages 8-97
Apron Services		Pages 8-9
Ava Inventory Managment		Pages 10-13
Apron Buyers Guide		Pages 16-21
Apron Care Instructions		Pages 22-23
Sizing and Measurements		Pages 26-27
Core Material Info		Pages 28-32
Apron Fabric Colors		Pages 33-41
Apron Customizations		Pages 42-45
Frontal Aprons		Pages 46-53
Full Protection Aprons		Pages 54-72
Apron Accessories		Pages 73-83
Pediatric Protection		Pages 84-88
Apron Storage		Pages 89-93
Apollo Quickship Aprons		Pages 94-97
EYEWEAR		Pages 98-141
Frame Info and Sizing		Pages 100-103
Wraparounds and Metals		Pages 104-112
Fitovers, Face Shields and Go	oggles	Pages 113-117
Designer Brands		Pages 118-137
Eyewear Accessories		Page 138-139
GLOVES		Pages 142-149
BARRIERS, DRAPES,	& SHIELDS	Pages 150-159
SCATTERGUARD DRA	APES	Pages 160-165



# Introduction

#### **SERVICES**

#### **Apron Rentals**

For those needing temporary radiation protection, Proguard rental aprons are the perfect solution. Rental aprons are essential for continuous education courses, cadaver workshops, or any other event that requires the use of fluoro and radiation protective apparel. There is no need to purchase and hold all of that inventory. Protech has a large selection of in stock apron rentals available to ship year round. **Up to 150 aprons - 48 hour minimum notice.** 

#### **The Particulars**

Our rental aprons are made with Prolite lead free, 0.35mm in the front (optional 0.50mm available) and 0.25mm in back (for full protection) - made with antimicrobial Satinguard fabric.

#### AVAILABLE RENTAL STYLES

#### **Front Protection Aprons**

The Flexback apron is our most popular apron style due to its comfort, light weight and easy donning. We have over 150 flexback aprons available in various sizes.

#### Flexback sizes available:

- Small, Medium, Large, X-Large, 2XL



#### **Full Protection Aprons**

If you're looking for maximum coverage, try on our full protection aprons (that means you're protected in the front AND the back). Most of our full protection rental aprons come in 0.50mm or 0.35mm protection in the front and 0.25mm protection in the back. Since full protection aprons are rarely requested, we have a limited quantity available.

#### Full protection styles available:

- Balance Vest and Skirt Apron

#### Sizes available:

- Small, Medium, Large, X-Large

#### **SERVICES**

#### **Repairs and Alterations**

Protech specializes in the repair of garments, drapes, curtains, and other protective apparel including competitor products. We're confident that our high-quality garments will stand up to the rigorous needs of healthcare professionals, but accidents do happen and time takes its toll! If your apron needs a little (or a lot of) TLC, we'll do our best to get your apron back in working condition. Our experienced repair and seamstress team is here to help!

#### **Common Repair Services**

While Protech's experienced team of professionals welcome any repair challenge. Here are some common repairs we do:

- Buckle or velcro replacement
- Fabric replacement
- Core Material patch work (for Protech aprons only)
- Binding Reinforcement

#### **Common Alteration Requests**

Need a size reduction? Or maybe you want additional protection? Here are some common alteration requests we accommodate:

- Size reductions side seams, length, shorten paws, etc.
- Add embroidery requires fabric replacement
- Add accessories sleeves, wings, suspenders, etc.
- Style conversions Ex. adding drop shoulders to vest



#### **Important Notes**

Before you send over your garment, you must contact Protech or your local representative and complete an RMA (Return) Form. Protech will assign an RMA # and include it on your form. Be sure to include this form inside and on your package to enable easy identification by our team.

We do charge an RMA evaluation fee to assess your garment. This fee varies on the type of piece and complexity of the request. If your lead garment is deemed unsalvageable, we can dispose of it for a fee (per piece) and can provide a "letter of destruction," or return the garment to you using your shipping label or a Protech shipping label (incurs shipping charges).

Since we work with other manufacturer's garments, there may be materials that don't match up 100% (fabric colors, thyroid collar attachments, etc). Our team will work with you to provide the best "like for like" options. We cannot do core material patch work on other manufacturer's aprons since our attenuation materials differ.

# 

Ava is free to use! No setup fees or contracts required. Our free, Basic subscription offers industry leading features; suitable for all facilities small and large!

#### **SERVICES**

#### Cloud based inventory management tracking

Protech introduces AVA: The intelligent way to manage and inspect your apparel as well as critical inventory items. AVA is an enterprise level software designed to scale for your organizational needs with flexibility and efficiency. AVA offers RFID capabilities that enable you to quickly scan and inspect multiple garments at the same time. Your inventory items will be managed from the minute your order is placed and throughout their life cycle. Passing The Joint Commission (TJC) inspections will no longer be a burden with Ava's cloud based functionality and easy reporting.

#### **Subscription Options**

	BASIC	ENTERPRISE	COMPLETE
Annual Cost	Free	Variable	Variable
Departments & Users	$\checkmark$	$\checkmark$	$\checkmark$
Multi-user Roles	✓	✓	$\checkmark$
Inspections & Inventory Reports	$\checkmark$	$\checkmark$	$\checkmark$
Multi-Facility Management	$\checkmark$	$\checkmark$	<b>√</b>
RFID Group Scan Inspections	-	$\checkmark$	$\checkmark$
Migrations Services	-	$\checkmark$	✓
Technical Support	-	$\checkmark$	$\checkmark$
Inspection Services	-	-	✓
Cleaning Services	-	-	$\checkmark$
Notification Settings	Limited	Advanced	Advanced



#### Backed by industry leaders

We have 1,000's of aprons to inspect on a tight budget and with limited time. Our old inspection software simply wasn't up to task. AVA's responsive staff imported our aprons in time for inspection and have ensured a smooth transition.

--- Lahey Hospital and Medical Center

"At first, AVA appeared to be overwhelming, but Jarrod helped us every step of the way. Whenever there was an issue, a brief call to AVA's professional team quickly helped resolve it. Thanks to AVA, managing our inventory is easy, and inspections are even easier."

--- Central Florida Regional Hospital

"We were a part of AVA's initial development team. It was amazing seeing our recommendations being added to the software almost immediately. AVA's use of RFID technology vastly improved our inspection proctess and their reports made passing The Joint Commission inspections as simple as a push of a button."

--- Central Main Medical Center

We wanted a software that could help manage apron inventory and improve inspection accuracy. We felt that the free softwares and apps were inadequate. Some of them even required employees to use their own personal devices. AVA was the only true enterprise software that delivered on what we were looking for."

--- Stamford Hospital

"Our existing tracking software was insufficient for our needs. AVA's time-saving features became apparent right away. Their RFID technology was great for scanning groups of aprons and the group inspections integrated perfectly into that process. We are happy with the software and look forward to AVA's many new innovations to come."

-- Northshore Medical

We decided on AVA because of its emphasis on inventory management, not just inspections. AVA's intuitive software made learning it a breeze. We were able to quickly retrofit our existing aprons and take control of our inventory challenges. -- Huntington Hospital

#### The Classic Smart Tag







All garments purchased through Protech come fitted with an Ava smart tag! The Ava smart tag features both a QR code and RFID inlay so you can easily scan your garments. Paired with a unique garment ID and velcro color indicators, keeping track of your garments has never been easier!

#### **Retrofitting Aprons**

Didn't purchase your apron with Protech? Not to worry. AVA works with or without AVA's Smart Tags and can utilize old ID tags. However, Retrofitting your apron with an AVA Smart Tags is easy! We supply everything you need.

roduction

# Introduction

# NN

# Which Ava subscription is right for your organization?

Depending on your organization's size and inspection proficiency, we have tailored 3 subscription tiers, each equipped with time saving features and backed by industry leading functionality. Our best-in-class system will improve your inspection reporting and streamline compliance.

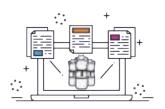
#### **BASIC**

#### Ava's Basic subscription is free to use and comes with the features below.



### MULTI-FACILITY ADMIN MANAGER

AVA's distinctive admin management system empowers you to scale and manage numerous hospital facilities, departments, and users together with 1 simple login.



## GROUP INSPECTION AND EDITING

Simplify inventory and inspection management with AVA's group editing features which allow you to record inspection results for large groups of aprons at one time.



#### IT FRIENDLY

AVA's hassle free platform operates independently from your hospital's network, streamlining the implementation process.



# INVENTORY MANAGEMENT

Keep track of all your inventory items (whether we made them or not) in one convenient location. AVA streamlines data entry and improves reporting accuracy.



## SIMPLE INVENTORY MIGRATION

AVA is an open platform and can manage all vendors' garments. Use our bulk upload tools for easy inventory migration. You may use AVA without the need to re-tag your aprons!



#### ACCESSIBLE FROM ANY DE-VICE

AVA is a cloud-based solution that puts you in the driver's seat. As long as you have internet and a device (phone, computer, tablet etc), you have access to AVA.

#### **ENTERPRISE**

#### Ava Enteprise comes with all the features below, in addition to the Basic features.



#### RFID TECHNOLOGY FOR RANGED SCANS

Use AVA's unique ranged RFID scanning technology to bulk scan & inspect garments (even through a locker).



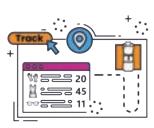
## MANAGED INVENTORY MIGRATION

Enjoy peace of mind knowing Ava's professional team will assist with inventory migration from your existing service to the AVA Cloud!



#### **CUSTOM ITEM GROUPS**

Embrace the freedom to create custom inventory groups which can meet a wide range of organizational and procedural needs.



**ORDER TRACKING** 

AVA's unique order management tools empower you with deep insight into the production of your aprons and when they will arrive to you.



# UNLIMITED DEPARTMENTS & USERS

Utilize the power of unlimited to scale your organization and meet any challenge.



# ADVANCED REPORTS

Generate custom reports for you and The Joint Commission. Can't find the report you're looking for? Our support team will gladly create it for you.

#### **COMPLETE**

# COMING SOON! Cleaning and Inspections Services

AVA Complete combines our garment management software with an in-house inspection and cleaning process which seamlessly integrates management of your garment's life cycle.

With a Complete subscription, Protech will manage your garment's annual inspections, professionally sanitize them, and ensure accurate reports are available for annual audit requirements.

Our comprehensive service will eliminate your garment management's hidden costs, improve compliance, and free up valuable Healthcare professional's time, leading to more hospital throughput.

Lead Garments are worn by healthcare professionals to protect them from the harmful effects of x-ray radiation during procedures requiring the use of x-ray and fluoroscopy. Lead aprons are usually worn in combination with other radiation protective products to provide complete protection from x-ray exposure.





# Flexible, tailored aprons proudly made in the USA

Protech specializes in custom-made aprons tailored for your needs. Choose from over 150 fabric colors for your apron's exterior, interior color, and binding trim. Personalize your apron with embroidery, logos and other add-ons or coordinate with our team for a truly customized experience.

Hand-crafted and made with proprietary polymer technology, our Proguard Aprons are more light-weight, flexible and durable than the competition.

Fulfilling our commitment to high quality, our Proguard Aprons are made in the USA by highly trained professionals and are backed by a 2 year warranty. Protech follows ISO Quality Management guidelines and is actively selling in global markets including Latin America, Europe, and Asia.



# APRON ORDERING GUIDE

STEP 1: CHOOSE YOUR APRON STYLE

We offer two types of aprons: Frontal and Full Protection.

As their names suggest, a Frontal apron only protects the front of your body, while a Full Protection apron offers both front, lateral, and back protection.

For a **lighter weight apron**, choose a Frontal style. Our most popular frontal apron is the Flexback apron but you can view all of our styles beginning on page 46.

For **greater protection**, choose a Full Protection apron. We recommend the Proguard Balance Vest and Skirt, which offers a balance of protection and comfort.

Other important factors that should be considered in choosing your apron style: procedure type, duration, body type and personal needs.







#### **WRAPAROUND APRONS**

#### **VEST SKIRT APRONS**

Our Wraparound full protection apron styles provide maximum protection from the front to the back and are excellent for long procedures with high exposure. They do contain more protective material and tend to be heavier than frontal aprons. Compared to other full protection styles (Vest Skirts), Wraparounds are usually easier to don but do concentrate weight on the shoulders. As a full protection apron, a proper fit is crucial for weight distribution and comfort. We offer a wide variety of customizations and addons to make your wraparound apron fit perfectly.

Vest Skirt Aprons are best suited for those wanting maximum protection during prolonged procedures with lateral/back exposure. While they contain more protective material due to overlapping between the vest and skirt, they eliminate up to 50% of the weight burden on the shoulders and provide more maneuverability. Our wide variety of Vest styles can be tailored according to your needs and are optimized to reduce weight by up to 15%. A proper fit is critical to ensure optimum protection, comfort, and longevity. Check out our customizations and addons to build your perfect apron.

Each core material varies in composition, weight and level of protection. Higher core material thicknesses result in more protection but also increase weight. The protection thickness of your garment, expressed as lead equivalence (LE), should be determined by your duration of exposure to x-ray and the intensity of the beam. The most critical factor is duration. For short, simple procedures utilizing lower kV beam intensities, 0.35mm LE may be suitable. Whereas 0.50mm LE should be used during long procedures regardless of beam intensity.

Please be sure to verify with your hospital administrator, director and/or state/local requirements regarding minimum lead equivalences before purchasing.

#### **ASTM & IEC CERTIFIED**

Standard Lead











Protech's thickness options are 0.25, 0.35, and 0.50mm LE with .50mm\* and .35mm\* LE being the most popular. We offer additional options upon request such as .75mm and 1.00mm. Standard protection for lead garments is 0.50mm in the front and 0.25mm in the back. For other product types such as dental aprons and some lead accessories, standard lead equivalences may vary.

#### **CORE MATERIAL THICKNESS OPTIONS**

#### **ASTM CERTIFIED**

**Prolite** 

**Premier** 





Nano





#### Lightest

Attenuates from 86-91% @ 90kV



#### **Optimal**

Attenuates approx. 94% @ 90kV



**Standard** 

Attenuates approx. 97% @ 90kV



#### **CONFIDENCE IN PROGUARD**



PROUDLY MADE
IN THE USA

With full time quality control staff and ISO certification, you are getting the best in American made protective apparel.



ULTRA-FLEXIBLE

**CORE MATERIALS** 

Proguard Core Material features more flexibility and durability resulting in superior, longer lasting comfort



IN-HOUSE EMBROIDERY & LOGOS

Don't let your apron "disappear." Our embroidery and logos are done in-house with modern monogram machines and the latest in digitization technology.



**CUSTOM APRONS** 

MADE TO MEASURE

Proguard aprons are made to order. More importantly, they can be customized according to size and various ergonomic needs by our highly trained staff.

#### **2 YEAR WARRANTY**

Protech's high quality garments are warrantied to be free of defects in materials and workmanship to the original purchaser for <u>2 years</u>. For full warranty information, visit our website protechmed.com.



# TAKING CARE OF YOUR APRON

It is important to establish a consistent, deep-cleaning schedule to mitigate the risk of pathogen transmission. Please clean your apron immediately *after each use.* You can clean most dirt and stains (blood, bodily fluids, barium contrast media) using room temperature water along with the following cleaning solutions: mild diluted soap, alcohol or ammonium-based wipes, and highly diluted Clorox hydrogen peroxide (not recommended for long term use as it results in degradation over time). To apply cleaning fluid, please use a cloth or wipe and always use room temperature water.

Please Note: If you're dealing with biohazardous materials, we recommend using an additional barrier (such as SMS gowns) to protect the apron.





#### **Examples of Approved Cleaners**

- PDI Sani-Cloth® AF3 Germicidal Disposable Wipes
- PDI Super Sani-Cloth® Germicidal Disposable Wipes
- CaviCide® wipes
- Alcohol and Ammonium based cleaners are strongly recommended
- Sodium Hypochlorite (bleach) cleaners, while acceptable, result in minor degradation over time



#### **DO NOT**

- Do not machine wash or dry your apron
- Do not use hot or warm water
- Do not iron or autoclave







### **STORAGE**

When not in use, garments should be placed on a hanger or stored using Protech's apron storage equipment. Best places to store your apron: Valet racks, peg racks, apron hangers and closets. If a hanger is not available, lay flat on a surface. For transportation, garments should be carefully rolled up, not folded, and placed into a box or Protech duffle bag.

All of our apron storage options can be found at the end of the apron section.

Please do not fold the aprons for an extended period of time as this will increase the chances of the inner material creasing or cracking. Also, avoid contact with sharp objects since they may damage the garment's protective core material. Keep garment out of direct sunlight or prolonged exposure to high heat. Store at 70–80°F (21–27°C). Temperature limits approximately 60–100°F (16–38°C).

**NO** 

AVA's enterprise level technology can save you time and money by helping you effectively manage your inventory and annual inspections. For more information, refer to pages 10–13.



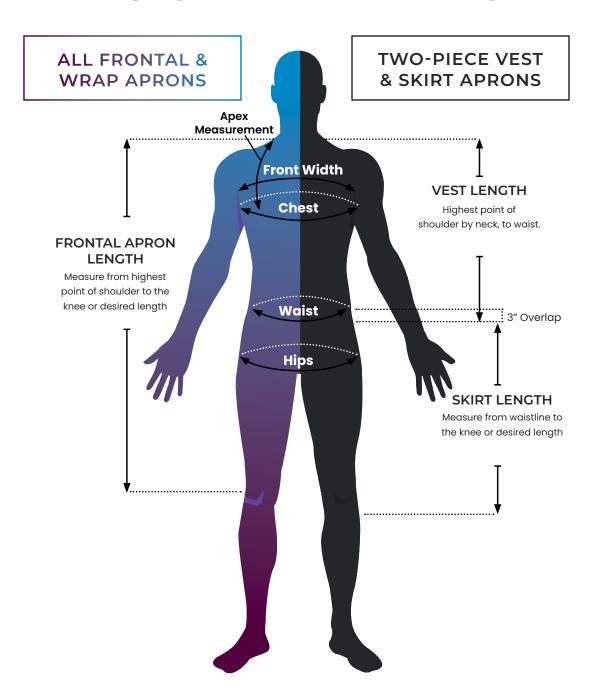
# APRON MEASUREMENTS

#### THE PERFECT FITTING APRON

Having a well-fitted apron optimizes for comfort, maximizes protection, and improves longevity. An apron that's too big will leave you with gaps in protection and an apron that's too small will leave you uncomfortable and restrict movement during procedures. Protech offers standard and customized sizing options to deliver the best experience and value. When determining the best option, review our measuring instructions and size charts on the following pages.

While most people can fit into a standard size apron, many prefer a custom fit due to unique proportions or to ensure adequate coverage of radio sensitive areas. For high quality, tailored aprons, Protech pride's itself on being the best in industry!

Nervous about getting it right? You can contact us at 561.627.9769 or sales@protechmed.com and well be happy to assist you. We have sales reps and local representation throughout the United States and in over 50 countries!







CHEST MEASUREMENT

Measure around the largest circumference of the bust area, keeping the tape parallel to the floor with the client's arms at their sides.



WAIST MEASUREMENT

Measure around the smallest circumference of the torso. If you measure at waist level it may be inaccurate.



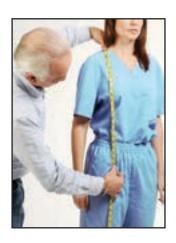
#### HIP MEASUREMENT

Measure around the largest circumference of the hips and buttocks with the tape parallel to the floor: generally 8-9 inches down from the waist.



#### FRONT APRON LENGTH MEASUREMENT

Measure from the top of the shoulder over the bust to the desired length. Do not contour the tape measure in under the bust.



#### VEST LENGTH MEASUREMENT

Measure from the top of the shoulder over the bust to the desired length. Do not contour the tape measure under the bust.



#### SKIRT LENGTH MEASUREMENT

Measure from the top of the pant line (waist) and over the outside of the hip down to the desired length.



#### **APEX ADJUSTMENT**

The Apex Adjustment is a necessary alteration to add or remove excess material near the shoulder area resulting when a customer has highly varied measurements. EG. Chest measurement is Large and the Waist measurement is 3XL: the resulting apron may have excess material in the shoulder because this apron will be cut from a larger pattern which assumes the wearer is taller. An Apex Adjustment of .5 to 1 inch would need to be made in order to remove excess material and eliminate "gapping."

### WOMEN MEN

#### **GENERAL APRON SIZING**

	xs	Small	Med	Large	XL	2XL	3XL
Height	5′1″	5′2″	5′5″	5′8″	5′10″	5′11″	
Chest	36	38	40	43	46	49	52
Waist	25	27	29	32	35	40	44
Hips	35	37	39	42	46	48	52
Frontal Length	33	34	36	38.5	40.5	42.5	42.5
Frontal Width	18	19	20	21	23	24	26
Vest Length	19	22	22	22	22	23	23
Skirt Length	20	20	22	22.5	22.5	22.5	24
WABR Length	33	34	37	40.5	42.5	42.5	44.5

#### TRI-TAB APRON SIZING

	Small	Med	Large	XL	2XL
Chest	38	40	43	46	49
est Length	22″	22″	22.5"	23″	26″

#### **General Instructions**

Standard sizes shown above apply as upper limits. If your measurements fall above a size's specified limit, we recommend you size up for additional allowance, aka "wiggle room." There is NO standard size allowance added so we recommend that you incorporate an additional 1-2" of "wiggle room" for the Chest measurement.

#### **Length Adjustments**

Length adjustments vary depending on your height and the required length adjustment to ensure your apron reaches around your knee cap. Any additional inches (up to 6") incur extra fees.

#### **GENERAL APRON SIZING**

xs	Small	Med	Large	XL	2XL	3XL	100
5′2″	5′4″	5′8″	5′11″	6′2″+			Height
39	42	45	49	53	57	61	Chest
32	34	38	42	46	50	54	Waist
34	36	40	44	48	52	56	Hips
34	34	37	40.5	42.5	42.5	45.5	Frontal Length
19	21	22	24	26	28	30	Frontal Width
22	22	24	25	25	25	28	Vest Length
20	20	20	21	21	22	22	Skirt Length
36	36	38	40.5	42.5	42.5	45.5	WABR Length

#### TRI-TAB APRON SIZING

	2XL	XL	Large	Med	Small
Chest	57	53	49	45	42
Vest Length	28.5"	28.5"	27.5"	27"	25"

#### Custom Sizing Allowances aka "Wiggle Room"

- All Styles XS to XL, by default, will be made with a +1" allowance in the Chest + Skirt waistaka "wiggle room."
- All Styles 2XL to 4XL, by default, will be made with a +2" allowance in the Chest + Skirt waist aka "wiggle room."
- If you do not want "wiggle room", you must specify.

#### **Quality Assurance Size Tolerances**

For all apron styles, our allowed size tolerances are -0 (no underage) up to +1".

# ADDITIONAL MEASUREMENTS

#### THYROID COLLAR SIZING\*

	Small/Reg.	Med	Large	XL
Original & Standard Thyroid	13-14"	15-16"	17"+	Custom
Proguard Thyroid	21″	22"	23"	24"
SG Disposable Thyroid	13-16″	-	17-20"	-
Visor Thyroid	25″	-	27"	-
Bib & Mammography Thyroid	One size fits all			

<sup>\*</sup>Measurements of neck circumference

#### **HEAD CAP SIZING\***

	Small	Med	Large	XL
Head Cap	21″	22"	23"	24"
Page Cap	21″	22"	23"	24"
Proguard Smart Cap	21-22"		23-	25″
SG Disposable Smart Cap	21″	22"	23"	-

<sup>\*</sup>Measurements of head circumference

#### KIDS APRON SIZING\*

Small	Medium	Large
12 x 24"	14 x 26"	16 x 28"
Ages 1-3	Ages 4-6	Ages 7-10

**Dimensions** 

Ages

\*Velcro Adjustable & Tie Aprons

#### APRON SLEEVE SIZING

1	Small	Med	Large	XL	2XL
Length (Standard)	11"	11″	11"	11″	11"
Length (Short)	8.5″	8.5"	8.5"	8.5"	8.5"
Circumference (Female)	15"	15"	16-17"	16-17"	17-18"
Circumference (Male)	15"	16-17"	18-19"	19-20"	19-20"

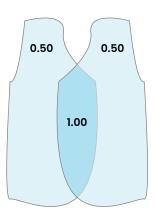
## **GARMENT LEAD CONFIGURATIONS**

To maximize customer choice, Protech manufactures a wide range of garments with unique, overlapping panel designs. Each style offers protection and comfort with flexibility, while optimizing for weight distribution. Review the protection configurations below to determine the style most suitable for your needs.

#### Frontal Panel(s) of Garment Styles Shown in 0.50mm LE Configuration

#### **Standard Overlapping** Front Panels

Balance Wraparound Back Relief, Balance Vest, Balance Flexback Vest

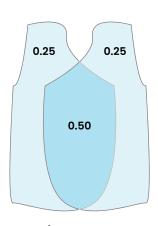


Ex) Balance Vest

These styles have the stated lead equivalence in EACH separate front panel and are designed to overlap only 2-6" at the center, using the "velcro" closure (lead equivalence/protection is doubled at overlap - ex 1.00mm Pb).

#### 3/4 Overlapping Front Panels

**Essentials Wraparound Back** Relief, Essentials Vest

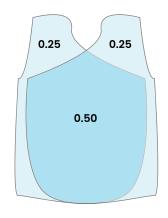


Ex) Essentials Vest

These styles have half (50%) the stated lead equivalence (mm Pb) in EACH front panel and achieve stated protection where panels overlap.

#### **Full Overlapping** Front Panels

Full Overlap Wraparound Back Relief, Full Overlap Vest



Ex) Full Overlap Vest

These styles have half (50%) the stated lead equivalence (mm Pb) in EACH front panel and achieve stated protection where panels overlap.

#### **Extended Full Overlap** Front Panels - IEC 60%

Full Wrap Vest

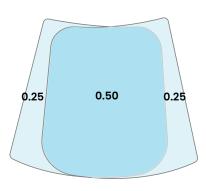


Standard Skirt, EZ Skirt



Ex) Full Wrap Vest

These styles have half (50%) the stated lead equivalence (mm Pb) in EACH front panel and achieve stated protection where panels overlap.



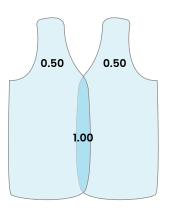
Ex) Standard Skirt

These styles have half (50%) the stated lead equivalence (mm Pb) in EACH front panel and achieve stated protection where panels overlap.

# Panel(s) of Garment Styles Shown in 0.50mm LE Configuration

#### Specialty Back Panel Overlapping Styles

Tri-Tab Vest, Wraparound
Flexback, Maternity Wraparound
Flexback, EZ Vest

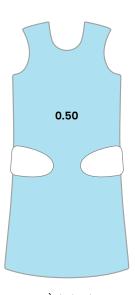


Ex) EZ Vest

These styles have the stated lead equivalence in EACH separate front panel and are designed to overlap only 2-6" at the center, using the "velcro" closure (lead equivalence/protection is doubled at overlap - ex1.00mm Pb).

#### Single Front Panel Styles

Frontal Aprons, Wraparound Flexback\*, Wraparound Flexback Maternity Apron\*, Maternity Apron, Tri-tab Vest\*, EZ Vest\*, Versa Wrap



Ex) Flexback

#### IEC 60% Front Protection Styles\*\*

Full Wrap Vest, Versa Wrap, EZ Vest, EZ Skirt

\*\*IEC 60% Protection means the side seams of the garment have been altered from being centered (50% front / 50% back) to being slightly off center (60% front / 40% Back). The styles listed above are designed to comply with IEC 60% Frontal Protection Requirements.



Full Wrap Vest and Skirt shown here

# CORE MATERIALS

Knowing what's inside your apron is equally important to how that apron claims to protect you.

Diagnostic imaging exposes personnel most prominently to x-ray energy in the 50 – 150kV range. Each metal used in your product provides specialized x-ray protection at certain kV ranges. Lead (Pb) has become the industry standard for radiation protection because it efficiently protects across the entire kV range of 50kV – 150kV. However, lead is also quite heavy and considered toxic for the environment. Other common non-lead metals used for radiation protection are Antimony, Barium, Cerium, Tungsten and Bismuth. While these metals are typically used in configurations that are much lighter than lead, they do not provide the same consistent protection over the 50 – 150kV range. For example, Antimony (Sb) and barium (Ba) provide more efficient attenuation of the photon spectrum below the K-edge window of lead (35 – 90kV), while higher Z elements like tungsten (W) and bismuth (Bi) are more efficient for stopping higher energy radiation (>90 kV). Knowing the limitations of each metal highlights the importance of using a balanced, multi metal formula to provide you with the most optimal protection.

Each Proguard core material is carefully formulated to more efficiently attenuate portions of the photon spectrum and limit "gaps" in protection due to over-reliance on individual x-ray protective elements. Protech utilizes proper elemental balance to address k-edge concerns for key diagnostic imaging ranges. Protech's advanced elastomers exhibit the best balance of toughness, flexibility, durability and cracking resistance.



Lightest

Attenuates from 86-91% @ 90kV



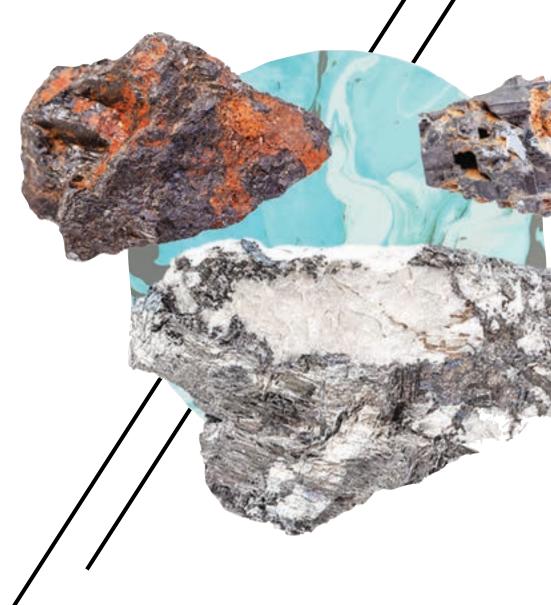
#### **Optimal**

Attenuates approx. 94% @ 90kV



#### **Standard**

Attenuates approx. 97% @ 90kV



# IEC + ASTM CORE MATERIALS

IEC core materials are designed with enhanced metal and layering configurations to meet the rigorous protection requirements of the IEC standard across mandated kV ranges. They are typically heavier than ASTM materials but usually provide wider kV range protection. The IEC standard is used in the European Union, the UK, Australia, and several other countries.





#### STANDARD LEAD

Waight Of Semana 2500 gam

#### PROLITE BILAYER IEC

2000 gam - 14% lighter than load

Weight @0.25mm:	3500 gsm	3000 gsm - 14% lighter than lead
<b>Key Components:</b>	Lead and Plasticizers	Bismuth and Plasticizers
Optimal kV Range:	50-150kV	60-150kV
Certifications:	ASTM & IEC Certified	ASTM & IEC Certified
Vay Danafta	Maximum Protection	Eco-friendly, balanced weight and highly protective
Average Apron Weights*	Standard Lead	Prolite Bilayer IEC
Frontal:	8.63 lbs	7.42 lbs
Vest and Skirt:	14.75 lbs	12.68 lbs
Wraparound:	15.95 lbs	13.71 lbs

<sup>\*</sup> Weights are measured using a 0.50mm LE core material thickness - medium sized apron. Protech makes every effort to accurately record its apron weights. Because each category is averaged, the numbers we provide in the weight chart are subject to a +/- 15% weight variance. Minor length or width adjustments, including heavier fabrics, are not differentiated and instead, averaged together.

# Aprons and Accessorie

# **ASTM CORE MATERIALS**

ASTM core materials are optimized for weight reduction and durability. ASTM requirements allow for flexibility in kV range requirements promoting more choices for a wider range of use cases. The ASTM standard is used in the USA and globally.







#### **PROLITE**

#### **PREMIER**

#### NANO

Weight @0.25mm:		2600 gsm - 26% lighter than lead	2300 gsm - 34% lighter than lead
<b>Key Components:</b>		Antimony and Plasticizers	Antimony and Plasticizers
Optimal kV Range:	80-110kV	70-110kV	80-100kV
Certifications:	ASTM Certified	ASTM Certified	ASTM Certified
Key Benefits:	An affordable, lightweight, and eco-friendly option	Eco-friendly, optimal balance of weight and protection	Ultra lightweight perfect for those with musculoskeletal issues
Average Apron Weights*	Prolite	Premier	Nano
Frontal:	7.16 lbs	6.38 lbs	5.87 lbs
Vest and Skirt:	12.32 lbs	10.91 lbs	9.96 lbs
Wraparound:	13.23 lbs	11.80 lbs	10.84 lbs

<sup>\*</sup> Weights are measured using a 0.50mm LE core material thickness - medium sized apron. Protech makes every effort to accurately record its apron weights. Because each category is averaged, the numbers we provide in the weight chart are subject to a +/- 15% weight variance. Minor length or width adjustments, including heavier fabrics, are not differentiated and instead, averaged together.

**APRON FABRIC** 

**COLORS** 

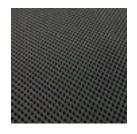
Protech carries a wide range of fabric colors and specialty performance materials. Our diverse selection consists of anti-microbial, wipe away options to moisture wicking fabrics and our own, in-house designed Limited Edition prints!





# PERFORMANCE FABRICS

#### **COOLGUARD FABRICS\***



**Coolguard Air** #900

A cushiony mesh material that enables natural air ventilation. Interior only.



**Coolguard Spandex** #915

Sweat wicking, breathable microfiber with quick dry technology.



**Coolguard Mesh** #910

Increases air flow on back closure of apron. For frontal apron back closures only.



Indigo #925

A soft, PVC nylon that is fluid-proof, stain resistant, bacteria & fungus resistant. Our lightest-weight fabric!



"Black Silk" #920

Ultra-soft & breathable polyester that is fluid proof & stain resistant.



placed on the inside of your apron to prevent slippage.

### SATINGUARD ANTI-MICROBIAL FABRICS\*



Featuring stain resistant and anti-microbial technology only available from Protech. Our soft poly material will resist a wide variety of bacteria for several years.



Matte Black #800



#825



Matte Cyan #805



Matte Light Gray #815



Matte Dark Gray #813



Matte Lilac #817



Matte Navy #820



Matte Fuschia #810



Matte Royal #802



Matte Dark Teal #828



Matte Light Teal #830

# LIMITED EDITION FABRICS (8)



#### 2025 LIMITED EDITION PRINTS\*



**Autumn Flow** #2120



Bone-nanza #2121



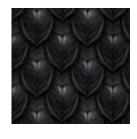
**Cardiac Couture** #2122



Cheeky Canines #2123



Chic Cheetah #2124



Dragon Armour #2125



Enchanted #2126



Mystic Flight #2127



Jurassic Galaxy #2128



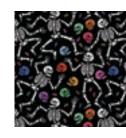
Monster Mash #2129



Paw-sitive Vibes #2130



Phoenix Wings #2131



Skele-bration #2132



Unicorn Utopia #2133



X-ray flowers #2134

# Aprons and Accessories

# LIMITED EDITION FABRICS (8)



#### 2024 LIMITED EDITION PRINTS\*



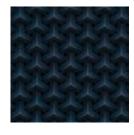
Athletic Department #2101



**Balloon Animals** #2102



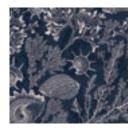
Black Camo #2103



Blue Steel #2104



Bone to be Wild #2105



Coral Gardens #2106



EKG #2107



Feline Fine #2108



Green & Brown Camo #2109



Hitting the Green #2110



**Kyoto Cranes** #2111



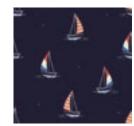
Life's a Beach #2112



Masked Heros #2113



Painted Flowers #2114

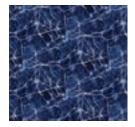


The Hamptons #2115

# LIMITED EDITION FABRICS



# 2023 LIMITED EDITION PRINTS\*



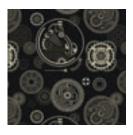
Blue Marble #2010



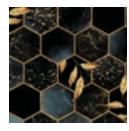
Body Positivity #2015



Galactic Kitties #2025



Grind my Gears #2035



Hex Yeah! #2040



Medically Necessary #2045



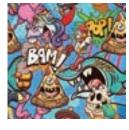
Midnight Jungle #2050



Party 'Till You're Dead #2070



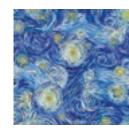
Reel Time #2075



Stable Genius #2080



Stardate: 2022 #2022



Starry Night #2090



Supernova #2095



This Lead is Bananas #2005



Tropical Smoothie #2100

# Unless specified otherwise, nylons come standard 210 denier.



# BINDING COLORS

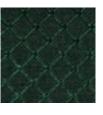


















Black #200

Brown #205

Burgundy #210

Chocolate #215

Forest Green #220

Green #225

Navy #230

Purple #235

#240





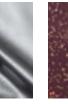
Royal Blue #245

Silver #250

# WIPE-AWAY VINYLS\*







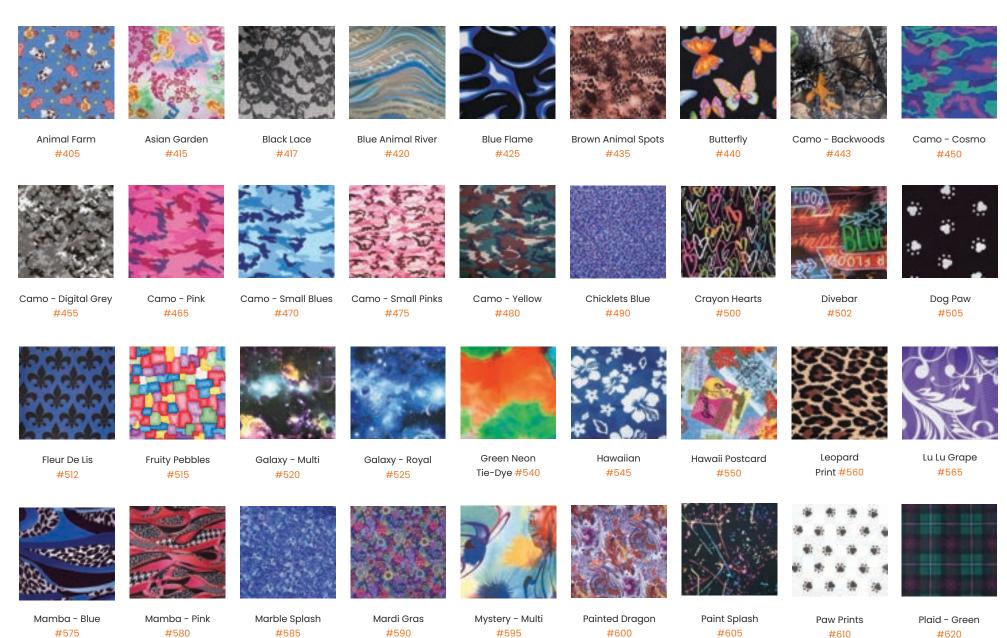


Black #300

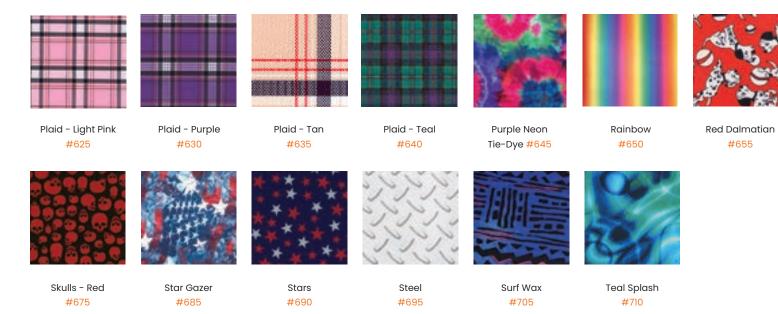
Silver #320

Burgundy Starlight #305

# **CLASSIC PRINTS**



# **CLASSIC PRINTS**



Skulls - Gray

#670

Sheep

#665

#655

CUSTOMIZATION OPTIONS

When it comes to designing your perfect custom apron, Protech is #1. Our great selection of apron add-ons can increase your protection and improve comfort. We offer 3 types of apron customizations: Comfort, Protection and Design addons. Each option is clearly defined to ensure you make the right choices for yourself.





# **LOGO AND EMBROIDERY**

Personalize your apron by placing your name or logo anywhere! We also have stock logos to choose from. Common locations include the pocket, just above the pocket, and on your thyroid.



# **EMBROIDERY AND LOGOS**

## **COMMON EMBROIDERY LOCATIONS**

1st person Perspective

(Right) (Left)



- (1) On Pocket
- 2 Above Pocket
- 3 Opposite Pocket
- 4) Thyroid Collar
- 5) Bottom Hemline (left)
- 6 Bottom Hemline (right)
- 7) Vest Hemline (left)
- 8) Vest Hemline (right)
- 9 Velcro patch
- (10) Addon/Accessory ex) sleeves



# **VELCRO PATCH**

A velcro patch with custom embroidery can be added to a specific area on your apron. Typical locations are on the pocket, above pocket, or to the left of your pocket. You can also have them on your thyroid collar.



# **COMFORT AND DESIGN**

### **LUXRAY PATTERNS**

Have your apron tailored to perfection with LuxRay's patterned accents on the apron sides, pocket and thyroid collar. If you have a special fabric you'd like to use, we can incorporate that as well!



Allows for maximum airflow in the back panels of your frontal apron and helps keep you cool.



Provides enhanced adjustability and lumbar support by shifting apron weight from shoulders to the hips.

# **BACK STRAP**

A Velcro backstrap keeps your apron shoulders secured and prevents slippage.

# **EXTRA POCKETS**

Need an extra pocket or two? Whether you need one on your skirt, inside your vest or even on your knees (yes, we did it), we can accommodate most requests. Shown here is a skirt pocket.



Specialty velcro tabs can be added to different apron styles allowing for easy removal of your apron to maintain sterile field.







# Aprons and Accessories

# **ADDITIONAL PROTECTION**

# SIDE EXTENSIONS

Side Extensions can provide an additional +2 inches of protection on both sides and provide important lateral protection. Protection levels will match your apron specifications.

# **AXILLARY WINGS**

Axillary wings are a protective flap sewn-in or "snapped-on" to your apron and offer vital protection to vulnerable breast tissue and red bone marrow areas. Protection levels will match your apron specifications.





# **APRON SLEEVE**

Apron sleeves wrap around your entire arm and offer comprehensive protection of vulnerable breast tissue and red bone marrow areas. Sleeves come standard in 0.25mm LE and can be sewn-in permanently or offered in our removable "Snap-on" option.

**Note:** To improve mobility, our apron sleeves are not sewn/attached at the armpit. We add a small "flap" which is tucked inside the apron armpit to ensure there are no gaps in protection.

# FRONT PROTECTION APRONS

Frontal Protection Aprons are a customer favorite! As their name suggest, frontal aprons only have protection in the front but are far more forgiving than full protection aprons. They contain less protective material, so they tend to be lighter and more flexible than full protection aprons. Frontal Aprons come in many different styles, some specialized for certain procedures and others are made with premium comfort features such as elastic closures and back relief belts.

Frontal aprons are fantastic options for short to moderate procedures where risk of lateral and back exposure is low. If you're looking for a reliable, lightweight apron we always recommend the Flexback apron!



# FLEXBACK APRON

BEST SELLE

MODEL: [AP-FB]

Representing the gold standard of quality, the Flexback apron design provides enhanced back relief, comfort, and excellent weight distribution. Criss-cross back straps are specially designed with elastic to "flex" the apron's weight burden off your shoulders to your hips, thereby providing support to your lower back. A velcro backstrap (shown below) is included and secures the apron around your shoulder area to prevent sliding.





# **APRON FEATURES**

# **Front Protection Apron**

## Backstrap

Velcro backstrap securely fastens shoulder area.

### **Elastic Back**

Provides enhanced adjustability and lumbar support. Shifts weight from the shoulders to the hips.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Back Mesh
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material Weight (0.25mm) Thickness Options	Core Material
---	---------------

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
MEC.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
100	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# BACK RELIEF APRON

BEST SEVICE

**MODEL:** [AP-BR]

Save yourself from back pain with Protech's Back Relief apron. This apron features a unique padded belt system constructed with a bonded elasticized panel that will not lose its shape. When engaged, the special back relief belt provides lumbar support while transferring the weight of the apron from your shoulders to your hips for increased comfort and back support throughout the life of the apron. A velcro backstrap is also included to secure the apron around your shoulder area and prevent sliding.





# **APRON FEATURES**

# **Front Protection Apron**

# Backstrap

Velcro backstrap securely fastens shoulder area.

### **Back Relief Belt**

Wide, elastic belt provides lumbar support and maximum comfort.

## **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

### **Apron Pocket**

**Belt Buckle Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Back Mesh
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
I EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34–41. Sizing info on pages 24–27.



# VELCRO ADJUSTABLE APRON

MODEL: [AP-VA]

Do you need comfort and adjustability at an affordable price? The Velcro Adjustable apron has crisscrossing back straps that provide back support while securing the apron around your waist. Wide back straps prevent the apron from slipping around your shoulder and back area. Pediatric sizing available, see the end of the apron section.



# **APRON FEATURES**

# **Front Protection Apron**

# **Wide Body Back Panels**

The comfortable panels secure your apron and provides lumbar support.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Back Mesh
- Backstrap
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

		•	•	
Pb	Lead	3500 gsm	0.25, 0.50mm	
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm	
lec.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm	
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm	
15.0	Nano	2300 gsm	0.35, 0.50mm	



For color options, see pages 34-41. Sizing info on pages 24-27.



# Aprons and Accessories

# SURGICAL DROP APRON

**MODEL:** [AP-SD]

Maintain your sterile field with the quick release Surgical Drop Apron. Easy-release velcro closures allow the surgical drop to fall even when underneath your scrubs. With padded shoulders and a criss-cross back strap design the surgical drop apron provides maximum comfort for all users. Hanging straps are included to allow for easy storage on any Protech apron rack.





# **APRON FEATURES**

# **Front Protection Apron**

# **Hanging Straps**

Hanging straps on the shoulders allow for easy storage on any Protech apronrack.

# **Surgical Drop**

Quick release velco closure tabs help maintain sterile field.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket

Core Material Weight (0.25mm)	Thickness Options
-------------------------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
I EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# BUCKLE APRON

MODEL: [AP-BA]

The Buckle Apron comes standard with an easy-release buckle allowing for quick removal of the apron. The belt is adjustable to accommodate different sizes. Criss-cross back straps provide a secure, comfortable fit.





# **APRON FEATURES**

# **Front Protection Apron**

# Wide Body Back Panels

The comfortable panels secure your apron and provides lumbar support.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Durable Buckle Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Elastic Back
- Back Strap
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
LEC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
10.0	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# Aprons and Accessories

# TIE APRON

MODEL: [AP-TA]

The Tie Apron is an easy-to-use, affordable option for x-ray protection. Utilizing a tie closure, the Tie Apron's criss crossing straps ensure a secure and comfortable fit. See Pediatric options at the end of this section.



# **APRON FEATURES**

# **Front Protection Apron**

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Tie Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Backstrap
- Apron Sleeve
- Axillary Wings

Core Material	Weight (0.25mm)	Thickness Options

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# UROLOGY APRON

MODEL: [AP-UA]

If you sit while performing procedures requiring x-ray, you may be unnecessarily exposing yourself to radiation. The Urology Apron features a three panel system at the bottom of the apron which enables the user to sit comfortably while maintaining maximum coverage from x-ray.



# **APRON FEATURES**

# **Front Protection Apron**

# Multi-Panel Design

Allows for easy maneuvering and a comfortable fit.

# Backstrap

Velcro backstrap securely fastens shoulder area.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Back Mesh
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

		<u> </u>	
Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
M <sub>EC</sub>	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# FULL PROTECTION APRONS

Full protection aprons provide more comprehensive coverage in the form of front, side, and back protection. They are best suited for those wanting maximum protection during prolonged procedures or procedures with possibilities for lateral and back exposure. Due to their increased coverage, full protection aprons are heavier than frontal aprons and less forgiving when it comes to fit.

We offer a diverse selection of full protection apron styles each with unique ergonomics and weight optimization features. Our customization options and add-ons will help build your perfect apron with proper protection, enhanced comfort, and greater longevity.



# TRI-TAB VEST AND SKIRT APRON

SEST SELLE

**MODEL:** [AP-TVEST](vest only) [AP-SKIRT](skirt only]

The popular Tri-tab Vest features a single front panel design which eliminates excess overlap and reduces weight by up to 10% compared to traditional vest styles. With an easy-on, easy-off multi tab (velcro) closure design (located on the left shoulder and around the hips), the Tri-tab provides a more ergonomic and forgiving fit. Elastic back enhancements permit a flexible and secure closure while also providing lumbar support and premium comfort. IMPORTANT: For the most accurate fit, please use the "Tri-tab Vest" measurements to determine your proper size.



# **APRON FEATURES**

# **Full Protection Apron**

### **Elastic Back**

Provides enhanced adjustability and lumbar support. Shifts weight from the shoulders to the hips.

### **Single Front Panel**

Eliminates excess overlapping panels achieving a 10% weight reduction (compared to VS model).

# Tri-tab Closure Design

Ensures a proper fit.

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

**Apron Pocket** 

Multi-tab Velcro Closure

**Hanging Tabs on Skirt** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Suspenders (skirt)

# Core Material Weight (0.25mm) Thickness Options

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
I EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
-	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# Aprons and Accessories

# ESSENTIAL™ VEST AND SKIRT APRON

**MODEL:** [AP-VQ](vest only) [AP-SKIRT](skirt only)

The Essential Vest features two, extended overlapping panels which achieve a 3/4 overlap when engaged. While the % overlapping panels are longer than the standard overlap vest panels, Essential Vests technically provide less protection due to the reduced protective material inside each panel. Thus, your desired front lead equivalence will only be achieved where the panels overlap. Essential vests are not an optimal choice if you are looking for maximum radiation protection and coverage, but they do provide aid to those who are more sensitive to weight and in need of reduced weight options. Please view our page detailing the different overlapping styles and designs for more information.



# **APRON FEATURES**

# **Full Protection Apron**

# Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

### **Extended Front Panels**

Front panels are extended to 3/4 overlap coverage and when overlapped, achieve the desired LE protection.

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

**Apron Pocket** 

**Velcro Closure** 

Hanging Tabs on Skirt

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings
- Suspenders (skirt)

Core Material	Weight (0.25mm)	Thickness Options

			•
Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
Mec.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# BALANCE™ VEST AND SKIRT APRON

PROTECTION

MODEL: [AP-V](vest only) [AP-SKIRT](skirt only)

The Balance Vest standard overlapping panel design makes it easy to don and maintain. Your desired lead equivalence is applied to both panels which doubles the protection where they overlap and ensures no gaps in protection are present during community use. The versatile Balance Vest is made with high quality buckle and velcro closures providing a secure and comfortable fit. The two-piece nature of the Vest and Skirt combination shifts weight to your hips and reduces back fatigue when compared to a full coat/wrap-around style apron.



# **APRON FEATURES**

# **Full Protection Apron**

## Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

# Standard Overlap Panels

Front panels are shorter, but the LE protection is doubled where overlapped.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

### Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

**Apron Pocket** 

**Velcro Closure** 

Hanging Tabs on Skirt

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings
- Suspenders (skirt)

# Core Material Weight (0.25mm) Thickness Options

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
M <sub>EC</sub>	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
233	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# **ESSENTIAL™ FLEXBACK VEST** AND SKIRT APRON



MODEL: [AP-VFBQ] (vest only) [AP-SKIRT] (skirt only)

The Essential Flexback Vest features a premium lumbar support belt system and two, extended overlapping panels which achieve a 3/4 overlap when engaged. While the % overlapping panels are longer than the standard overlap vest panels, Essential Vests technically provide less protection due to the reduced protective material inside each panel. Thus, your desired front lead equivalence will only be achieved where the panels overlap. Essential vests are not an optimal choice if you are looking for maximum radiation protection and coverage, but they do provide aid to those who are more sensitive to weight and in need of reduced weight options. Please view our page detailing the different overlapping styles and designs for more information.

Note: Available in Standard sizes only.



# **APRON FEATURES**

# **Full Protection Apron**

## Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

### **Extended Front Panels**

Front panels are extended to 3/4 overlap coverage and when overlapped, achieve the desired LE protection.

### Flexback Belt

Wraps internally around your back and securely fastens in the front.

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

### Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

### **Apron Pocket**

Velcro Closure

Coro Matorial

Hanging Tabs on Skirt

# Additional Customization **Options**

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket

Thickness Ontions

- Apron Sleeve
- Axillary Wings
- Suspenders (skirt)

	Core	- Material	weight (0.25mm)	mickiness options
	Pb	Lead	3500 gsm	0.25, 0.50mm
ı	36.0	Dualita	0050	0.05 0.25 0.50

Moight (0.25mm)

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
HEC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# BALANCE™ FLEXBACK VEST AND SKIRT APRON

ST PROTECTION

**MODEL:** [AP-VFB](vest only) [AP-SKIRT](skirt only)

The Balance Flexback Vest standard overlapping panel design makes it easy to don with its premium lumbar support belt system. Your desired lead equivalence is applied to both panels which doubles the protection where they overlap and ensures no gaps in protection are present during community use. The versatile Balance Vest is made with high quality buckle and velcro closures providing a secure and comfortable fit. The two-piece nature of the Vest and Skirt combination shifts weight to your hips and reduces back fatigue when compared to a full coat/wrap-around style apron.



# **APRON FEATURES**

# **Full Protection Apron**

## Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

## Standard Overlap Panels

Front panels are shorter, but the LE protection is doubled where overlapped.

### Flexback Belt

Wraps internally around your back and securely fastens in the front.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

### Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

**Apron Pocket** 

**Velcro Closure** 

Hanging Tabs on Skirt

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings
- Suspenders (skirt)

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
No	Prolite	2850 gsm	0.25, 0.35, 0.50mm
ILEC.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# **FULL OVERLAP VEST AND** SKIRT APRON

**MODEL:** [AP-VFO](vest only) [AP-SKIRT](skirt only)

The Full Overlap Vest features two, fully extended overlapping panels which achieve near seam-to-seam coverage; your desired lead equivalence is achieved where each panel overlaps the other with a minor 1 – 2 inch gap near the side seams. While not as easy to don, the Full Overlap Vest provides visual clarity that you have near complete frontal coverage. Elimination of excess overlap results in a roughly 10% reduction in weight as compared to the standard overlap design. The versatile Full Overlap Vest is made with high quality buckle and velcro closures providing a secure and comfortable fit. The two-piece nature of the Vest and Skirt combination shifts weight to your hips and reduces back fatigue when compared to a full coat/wrap-around style apron.



# **APRON FEATURES**

# **Full Protection Apron**

## Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

### **Extended Front Panels**

Front panels are extended for almost seam-to-seam coverage

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

**Apron Pocket** 

**Velcro Closure** 

Hanging Tabs on Skirt

# Additional Customization **Options**

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Back Mesh
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

		<u> </u>	<u>'</u>
Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
HEC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
45	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# **ESSENTIAL™ WRAPAROUND BACK RELIEF APRON**

**MODEL:** [AP-WAQ]

The Essential Wrap-Around Back Relief Apron (aka "Wrap" or "Coat") features a premium lumbar support belt system and two, extended overlapping panels which achieve a 3/4 overlap when engaged. While the % overlapping panels are longer than the standard overlap panels, Essential Wraps technically provide less protection due to the reduced protective material inside each panel. Thus, your desired front lead equivalence will only be achieved where the panels overlap. Essential Wraps are not an optimal choice if you are looking for maximum radiation protection and coverage, but they do provide aid to those who are more sensitive to weight and in need of reduced weight options. Please view our page detailing the different overlapping styles and designs for more information.

Note: Available in Standard sizes only.





# **APRON FEATURES**

# **Full Protection Apron**

## Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

### **Extended Front Panels**

Front panels are extended to 3/4 overlap coverage and when overlapped, achieve the desired LE protection.

### **Back Relief Belt**

Wraps internally around your back and securely fastens in the front.

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

### **Apron Pocket**

**Velcro Closure** 

# Additional Customization **Options**

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings

Core Material	Weight (0.25mm)	Thickness Options
•	•	•

		<u> </u>	
Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
IEC.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# BALANCE™ WRAPAROUND BACK RELIEF APRON

SST PROTECTION

**MODEL:** [AP-WABR]

The Balance Wrap-Around Back Relief Apron's (aka "Wrap" or "Coat") standard overlapping panel design makes it easy to don with its premium lumbar support belt system. Your desired lead equivalence is applied to both panels which doubles the protection where they overlap and ensures no gaps in protection are present during community use. The versatile Balance Wrap is made with high quality buckle and velcro closures providing a secure and comfortable fit.





# **APRON FEATURES**

# **Full Protection Apron**

## Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

### Standard Overlap Panels

Front panels are shorter. LE protection is doubled at overlap.

### **Back Relief Belt**

Wraps internally around your back and securely fastens in the front.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

## **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
I EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# FULL OVERLAP WRAPAROUND BACK RELIEF APRON



**MODEL:** [AP-WAFO]

The Full Overlap Wrap-Around Apron features two, fully extended overlapping front panels which achieve near seam-to-seam coverage; your desired lead equivalence is achieved where each panel overlaps the other with a minor 1 – 2 inch gap near the side seams. While not as easy to don, the Full Overlap Wrap provides visual clarity that you have near complete frontal coverage. Elimination of excess overlap results in a roughly 10% reduction in weight as compared to the standard overlap design. The versatile Full Overlap WrapAround Apron is made with high quality buckle and velcro closures providing a secure and comfortable fit.





# **APRON FEATURES**

# **Full Protection Apron**

# Adjustable Buckle Set

Adjustable buckle closures ensure a secure fit.

### **Extended Front Panels**

Front panels are extended for almost seam-to-seam coverage

### **Back Relief Belt**

Wraps internally around your back and securely fastens in the front.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

## **Apron Pocket**

**Velcro and Buckle Closures** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
I EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# MATERNITY APRON

**MODEL:** [AP-MA]

The Maternity Apron is our heavy-duty, complete protection solution for expecting mothers who are undergoing or performing in diagnostic imaging. A large back and front panel are secured via crisscrossing tie straps which enables easy adjustability throughout the pregnancy. Maximum protection is provided in each panel and an additional half apron is included to provide additional protection in the abdominal region.



# **APRON FEATURES**

# **Full Protection Apron**

# Complete Coverage

The front & back panels ensure you are fully protected from beginning to end of your pregnancy.

# **Half Apron Included**

A Half apron is included for additional protection as you progress through your pregnancy.

### **Shoulder Tab Closure**

Velcro shoulder tab ensures easy donning.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

**Apron Pocket** 

**Tie Closures** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings

Core Material	Weight (0.25mm)	Thickness Options
Corc Material	WCigite (0.23iiiii)	THICKINGS OPTIONS

_				<u> </u>	
	W	Prolite	2850 gsm	0.25, 0.35, 0.50mm	
	Mis	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm	
	PR	Premier	2600 gsm	0.25, 0.35, 0.50mm	



For color options, see pages 34-41. Sizing info on pages 24-27.



# WRAPAROUND FLEXBACK MATERNITY APRON

**MODEL:** [AP-MAWA]

The Wrap-Around Flexback Maternity Apron was born from our Wrap-Around Flexback design and incorporates our highly popular Flexback elastic-back technology with the versatility and comfort of our tri-tab closure system. A single front panel design eliminates excess overlap and reduces weight by up to 10% compared to traditional wrap styles. The Wrap-Around Flexback Maternity Apron distinguishes itself by delivering a lightweight fit and premium ergonomics all while maintaining optimal protection.





# **APRON FEATURES**

# **Full Protection Apron**

### **Elastic Back**

Provides enhanced adjustability and lumbar support. Shifts weight from the shoulders to the hips.

### Single Front Panel

Eliminates excess overlapping panels achieving a 10% weight reduction (compared to other wraparound and VS models).

### Tri-tab Closure

Ensures a proper fit and easy donning.

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings

Core Material	Weight (0.25mm)	<b>Thickness Options</b>
Core Material	weight (0.25mm)	inickness Options

1	Prolite	2850 gsm	0.25, 0.35, 0.50mm
Mec	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# WRAPAROUND FLEXBACK APRON





**MODEL:** [AP-WAFB]

The Wrap-Around Flexback design incorporates our highly popular Flexback elastic-back technology with the versatility and comfort of our tri-tab closure system. A single front panel design eliminates excess overlap and reduces weight by up to 10% compared to traditional wrap styles. The Wrap-Around Flexback distinguishes itself by delivering a lightweight fit and premium ergonomics all while maintaining optimal protection.





# **APRON FEATURES**

# **Full Protection Apron**

### **Elastic Back**

Provides enhanced adjustability and lumbar support. Shifts weight from the shoulders to the hips.

### **Single Front Panel**

Eliminates excess overlapping panels achieving a 10% weight reduction (compared to other wraparound and VS models).

### Tri-tab Closure

Ensures a proper fit.

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

# **Apron Pocket**

Velcro Closure

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket

Core Material Wei	ght (0.25mm)	Thickness Options
-------------------	--------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
Ne	Prolite	2850 gsm	0.25, 0.35, 0.50mm
IEC.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
200	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# FULL WRAP VEST AND SKIRT APRON

ON OVERLAPPROVED

**MODEL:** [AP-VFW](vest only) [AP-SKIRT](skirt only)

The Full Wrap Vest provides seam to seam coverage of your chosen protection level with its large overlapping front panels. Specially placed velcro on the internal panels enables superior closure mobility and easy donning. The full frontal panel design optimizes for reduced weight and improved comfort.





# **APRON FEATURES**

# **Full Protection Apron**

# IEC 60% Frontal Design

Compliant with IEC 60% frontal design requirement

### **Extended Front Panels**

Front panels are extended for full seam-to-seam coverage

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

## Non-slip Backing

(On skirt interior) Reduces slippage and improves fit.

**Apron Pocket** 

**Velcro Closure** 

Hanging Tabs on Skirt

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Back Mesh
- Backstrap
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
EC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# Aprons and Accessorie

# VERSA WRAP APRON

ONER APPROVED

**MODEL:** [AP-VW]

The Versa Wrap features two separate front and back panels which are buckled together to provide optimal front, back, and lateral protection. The high-quality buckle closure system promotes convenient adjustability for a comfortable fit. Two Surgical Drop shoulder buckles enable easy on/easy off versatility while maintaining sterile field.

IEC 60% Frontal Overlap: the IEC design parameters require that the greater protection of the frontal area should extend past the normal evenly split side seam into the back area by an additional 10%. Resulting in a front area to back ratio of 60% to 40%.





# **APRON FEATURES**

# **Full Protection Apron**

# IEC 60% Frontal Design

Compliant with IEC 60% frontal design requirement

# Surgical Drop Design

Multi-Buckle Closures enables easy on/off mechanics during procedures to maintain sterile field

### **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

**Apron Pocket** 

**Buckle Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
MEC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# EZ VEST APRON

ONERA APPROVED

**MODEL:** [AP-VEZ]

A more efficient and ergonomic vest design providing EZ comfort! The EZ Vest features a single front panel and dual back panels with large, criss-crossing, elastic strap closure tabs. The shortened back panels enable better closure maneuverability and wearability while the larger elastic straps promote a secure fit and reduce back and shoulder fatigue.



# **APRON FEATURES**

# **Full Protection Apron**

# IEC 60% Frontal Design

Compliant with IEC 60% frontal design requirement

# **Elastic Straps for Support**

Provides enhanced adjustability and lumbar support.

## **Single Front Panel**

Eliminates excess overlapping panels achieving a 10% weight reduction (compared to other wraparound and VS models).

# **Shoulder Padding**

Premium foam padding in the shoulders provides extra comfort.

### **Apron Pocket**

**Velcro Closure** 

# Additional Customization Options

- Thyroid Collar
- Embroidery
- Logo
- Extra Pocket
- Apron Sleeve
- Axillary Wings
- Drop Shoulders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
M	Prolite	2850 gsm	0.25, 0.35, 0.50mm
HEC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# EZ SKIRT APRON

ONERA APPROVED

**MODEL:** [AP-SKEZ]

The EZ Skirt features a built-in elastic belt which provides EZ security and comfort! Made with a single back panel and 2 wider front panels, the EZ skirt's ergonomic design maximizes wearability and protection. Additional enhancements include adjustable buckle sets and an anti-slip fabric included on the built-in elastic belt.



# **APRON FEATURES**

# **Full Protection Apron**

# IEC 60% Frontal Design

Compliant with IEC 60% frontal design requirement

# **Integrated Elastic Belt**

Provides enhanced adjustability and lumbar support. EZ belt system makes skirt easy to don.

### **Contoured Back Panel**

Curved skirt panel allows for easier movement.

# Non-slip Backing

Reduces slippage and improves fit.

# **Hanging Tabs**

Velcro and Belt Closure

# Additional Customization Options

- Embroidery
- Logo
- Skirt Pocket
- Suspenders

Core Material	Weight (0.25mm)	Thickness Options

		<u> </u>	<u> </u>
Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
LEC.	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# SKIRT APRON

**MODEL:** [AP-SKIRT]

Made with a single back panel and 2 strwamlined front panels, the skirt apron's ergonomic design maximizes wearability and protection. Additional enhancements include adjustable buckle sets, and an anti-slip fabric tastefully integrated on the inner panels.





# **APRON FEATURES**

# **Full Protection Apron**

# Non-slip Backing

Reduces slippage and improves fit.

# **Hanging Tabs**

Velcro and Belt Closure

# Additional Customization Options

- Embroidery
- Logo
- Skirt Pocket
- Suspenders

Core Material	Weight (0.25mm)	Thickness Options
---------------	-----------------	-------------------

Pb	Lead	3500 gsm	0.25, 0.50mm
N	Prolite	2850 gsm	0.25, 0.35, 0.50mm
HEC	Prolite IEC	3000 gsm	0.25, 0.35, 0.50mm
PR	Premier	2600 gsm	0.25, 0.35, 0.50mm
	Nano	2300 gsm	0.35, 0.50mm



For color options, see pages 34-41. Sizing info on pages 24-27.



# **DENTAL PANORAMIC PONCHO**



MODEL AP-DP

CORE MATERIALS All Core Types (see page 30)

THICKNESS 0.50, 0.35, 0.25mm (standard) LE

CLOSURE Velcro

SIZING Adult: 24" W x 27" L (front) 16" L (back)

Pediatric: 18"W x 22"L (front) 12"L (back)

CUSTOMIZATIONS Embroidery and Logo

ADD-ONS Thyroid Collar

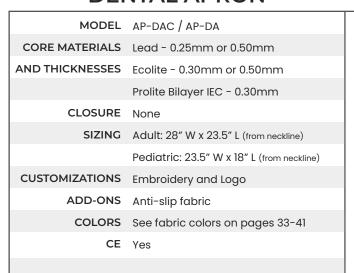
COLORS See fabric colors on pages 33-41

CE Yes

Drapes over the body to provide front and back protection during dental imaging. The Panoramic Poncho is secured via velcro closure on the back panels. It comes in an Adult and Child size and is available in select core materials and protection options: Ecolite 0.50 and 0.30mm LE, Prolite IEC 0.30mm LE, and Standard Lead 0.50 and 0.25mm Pb.



# **DENTAL APRON**





The Dental apron drapes over the body to provide front protection during dental procedures and x-rays. It comes with large hanging straps for easy storage and is available with attached velcro thryoid collar (AP-DAC) or without thyroid collar (AP-DA).



APRON ACCESSORIES

Protech's lead accessories are designed to effectively attenuate radiation, significantly reducing the risk of both acute and long-term health effects. Comprehensive protection not only safeguards individual health but also promotes a culture of safety within the workplace, encouraging adherence to best practices and regulatory standards. By prioritizing the use of proper protective gear, workers can confidently carry out their duties while ensuring their well-being and that of their patients, ultimately enhancing the overall safety of the healthcare environment.



### STANDARD THYROID COLLAR



MODEL AP-TCS CORE MATERIALS All Core Types (see page 30) **THICKNESS** 0.50 (standard), 0.35, 0.25mm LE **CLOSURE** Velcro, Magnets or Buckle (shown) SIZING Small: 13-14" (neck circ.) Medium: 15-16" (neck circ.) Large: 17"+ (neck circ.) X-Large: Custom **CUSTOMIZATIONS** Embroidery and Logo ATTACHMENTS Loose, Clip, Keyring, Tethered COLORS See fabric colors on pages 33-41 **CE** Yes

The standard radiation thyroid collar is designed to fit higher along the neck while providing complete coverage of the thyroid against x-ray radiation.

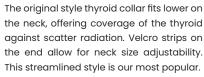


### ORIGINAL THYROID COLLAR





MODEL AP-TCO CORE MATERIALS All Core Types (see page 30) **THICKNESS** 0.50 (standard), 0.35, 0.25mm LE CLOSURE Velcro (shown), Magnets or Buckle SIZING Small: 13-14" (neck circ.) Medium: 15-16" (neck circ.) Large: 17"+ (neck circ.) X-Large: Custom (neck circ.) **CUSTOMIZATIONS** Embroidery and Logo ATTACHMENTS Loose, Clip, Keyring, Tethered COLORS See fabric colors on pages 33-41 CE Yes





### **VISOR THYROID COLLAR**



MODEL	AP-TCV-RG (reg.)   AP-TCV-LG (large)
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro (shown) or Magnets
SIZING	Regular: 25" (neck circ.)
	Large: 27" (neck circ.)
CUSTOMIZATIONS	Embroidery and Logo
ATTACHMENTS	Loose, Clip, Keyring, Tethered
COLORS	See fabric colors on pages 33-41
CE	Yes

Ergonomically designed for a snug fit, the Visor thyroid is optimized for comfort and maximum protection. The neck piece provides additional front and lateral protection.



### **BIB THYROID COLLAR**





MODEL	AP-TCB (reg.) / AP-TCBL (oversized)
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro (shown) or Magnets
SIZING	One size fits all
DIMENSIONS	Regular - 24" L x 7.5" H (4.5" bib)
	Oversized - 24" L x 9" H (6" Bib)
CUSTOMIZATIONS	Embroidery and Logo
ATTACHMENTS	Loose, Clip, Keyring, Tethered
COLORS	See fabric colors on pages 33-41
CE	Yes

The Bib thyroid's streamlined design provides a comfortable fit as well as complete coverage to the neck area. For those wanting a little extra coverage, we also offer an oversized Bib option (6" in length).





### MAMMOGRAPHY THYROID COLLAR



MODEL	AP-TCM
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro (shown) or Buckle
SIZING	One Size: 29" L, 4" Bib
CUSTOMIZATIONS	Embroidery and Logo
ATTACHMENTS	Loose, Clip, Keyring, Tethered
COLORS	See fabric colors on pages 33-41
CE	Yes

Don't let the standard or original thyroid collar get all the attention. The mammography's sleek profile provides a detachable alternative to "sewn-in" thyroid collars while allowing for adjustability. Additionally, the mammography thyroid collar serves as a valuable option for patient protection.



### PROGUARD THYROID COLLAR



MODEL	AP-TCG
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro
SIZING	Small: 21" (neck circ.)
	Medium: 22" (neck circ.)
	Large: 23" (neck circ.)
	X-Large: 24" (neck circ.)
CUSTOMIZATIONS	Embroidery and Logo
ATTACHMENTS	Loose, Clip, Keyring, Tethered
COLORS	See fabric colors on pages 33-41
CE	Yes

Featuring a form-fitting design and velcro closure, the Proguard thyroid collar provides comprehensive front and back protection.



### PROGUARD SMART CAP





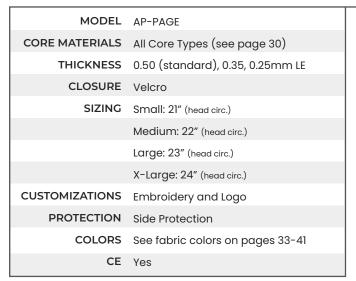
MODEL	AP-PGCAP
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Beaded Adjustable Strap
SIZING	SM-M: 21-22" (head circ.)
	L-XL: 23-25" (head circ.)
CUSTOMIZATIONS	Embroidery and Logo
PROTECTION	Side Protection
COLORS	See fabric colors on pages 33-41
CE	Yes

Need head protection that is breathable, light-weight, and comfortable? The Proguard Smart Cap features breathable CoolGuard spandex fabric on the top while providing protection around the sides of your head.



### **PAGE CAP**





The Page Cap is designed to provide protection around the sides of your head, while the top contains no lead. Alternatively, similar to a scrub cap, the Head Cap provides x-ray protection around the entire head. Velcro tab closures allow for an adjustable fit on both styles. \*Sizes based on head circumference.



### **HEAD CAP**

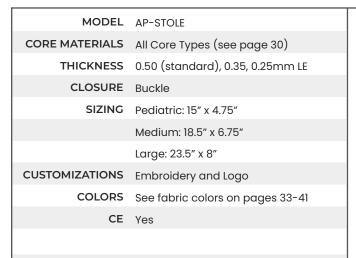


MODEL	AP-CAP
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro
SIZING	Small: 21" (head circ.)
	Medium: 22" (head circ.)
	Large: 23" (head circ.)
	X-Large: 24" (head circ.)
CUSTOMIZATIONS	None
PROTECTION	Top and Side Protection
COLORS	See fabric colors on pages 33-41
CE	Yes

Similar to a scrub cap, the Head Cap provides x-ray protection around the entire head. Velcro tab closures allow for an adjustable fit on both styles. \*Sizes based on head circumference.

### **SCOLIOSIS STOLE**





The scoliosis stole is primarily used for spinal imaging. The shield features velcro panels and an adjustable belt for proper positioning. The neck area does not contain lead, allowing complete visibility of the spine during x-ray, while offering protection to the breast area. This shield is great for scoliosis studies.





### **GONAD/OVARIAN SHIELD**



	1
MODEL	AP-GONAD/GONAD-SET
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro (standard) or Buckle
SIZING	Small - 5.75" x 4.5"
	Medium - 7.6" x 6.4"
	Large - 9.5" x 7.8"
	Pediatric sizing available
CUSTOMIZATIONS	Embroidery and Logo
SPECIAL	Available as a set of 3 or individually
COLORS	See fabric colors on pages 33-41
CE	Yes

The gonad shield provides essential protection to radiosensitive reproductive organs. Secured via a velcro or buckle closure system, the Gonad shield is sold in 5 individual sizes or as a set of 3.



### **SHIN GUARDS & FOOT COVERS**



MODEL	AP-SHIN   AP-FOOT
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Veclro
SIZING	SM: 13" x 9"
	M: 14" x 10"
	L: 16" x 12"
	XL: 18" x 24"
CUSTOMIZATIONS	Embroidery and Logo
COLORS	See fabric colors on pages 33-41
CE	Yes

When being exposed to ionizing radiation, all forms of radiation protection are necessary. Shin Guards provide essential protection to extremities which may not be covered from scatter radiation; especially if no table drapes are present. Optional foot covers may be added (AP-FOOT) for complete protection.





(AP-FOOT)

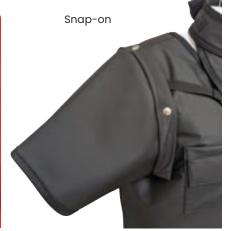
### **APRON SLEEVE**



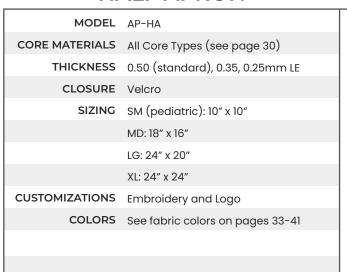
MODEL	AP-SLV (sewn-in) / SLV2 (snap-on)
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50, 0.35, 0.25mm (standard) LE
CLOSURE	Snap-on or Sewn-in
SIZING (FEMALE)	Small, Medium, Large, XL, 2XL
SIZING (MALE)	Small, Medium, Large, XL, 2XL
	Length (reg.): 11"   Length (short): 8.5"
	Circumference: see size charts
CUSTOMIZATIONS	Embroidery and Logo
COLORS	See fabric colors on pages 33-41
CE	Yes

This optional sleeve is available for many apron styles and protects the upper arm and shoulder from direct beam and scatter radiation. It can be attached as a snap-on or directly sewn-on. Please note that the apron sleeve is not fully attached at the armpit. An optional flap is available for additional protection/coverage (see customizations page for more info). Price is per (1) sleeve.





### **HALF APRON**





The half apron can provide extra radiation protection. Selling it separate also allows you to mix and match a smaller bottom half with a larger top piece or vice versa.



### **CORSET BELT**

MODEL	AP-CORSET
PROTECTION	None
SIZING (FEMALE)	Small - 4XL (Use apron waist measurement)
SIZING (MALE)	XS - XL (Use apron waist measurement)
COLORS	Black

Our corset belt is a great apron accessory for added back support when wearing a radiation protective apron. The finger pull tab and pulley system along the spine provides for simple adjustment and even tension.

- \*The corset belt is worn under the apron.
- \*\*Use apron waist measurements on page 59 to determine your size.



### **BACK RELIEF BELT**

MODEL	AP-BLT
PROTECTION	None
CLOSURE	Buckle
SIZING (FEMALE)	XS: 24-26"   S: 26-28"
	M: 28-31"   L: 31-33"
	XL: 34-38"
SIZING (MALE)	XS: 30-33"   S: 33-36"
	M: 37-40"   L: 41-44"
	XL: 44-48"
CUSTOMIZATIONS	None
COLORS	See fabric colors on pages 33-41

The back relief belt is constructed of neoprene bonded elastic. It features high quality components that do not lose elasticity. The belt also features a non-slip adjustable buckle to ensure a secure fit. The back relief belt attaches separately from the apron.



### **APRON SUSPENDERS**

MODEL	AP-SUSP2
CORE MATERIALS	None
MATERIAL	Black Nylon
SIZING	One size fits all

Need a little extra help holding up your skirt? Try our apron suspenders to keep that apron skirt right where you want it.



### THYROID COLLAR COVERS

SG-TCCD
None
Blue SMS
One size fits all
Disposable
50 per box

Our disposable thyroid collar covers do not provide protection against x-ray, but are a useful way to encourage the use of thyroid collars by keeping them clean. The thyroid collar covers fit a wide variety of thyroid collar styles, will prevent damage from make-up and prevent the build-up of filth. Extend the life of your thyroid collars by covering them with ScatterGuard's hygienic, disposable thyroid collar cover.





### **DISPOSABLE SMART CAP**



MODEL	SG-DCAP
CORE MATERIALS	Prolite
THICKNESS	0.60, 0.125, 0.25*, or 0.50mm LE
CLOSURE	Ties
SIZING	Small - 21" (head circ.)
	Medium - 22" (head circ.)
	Large - 23" (head circ.)
CUSTOMIZATIONS	None
FABRIC	Blue SMS
CE	Yes* (only 0.25mm LE)

ScatterGuard's disposable Smart Caps are designed to provide essential protection against scatter radiation. Smart Caps feature a cotton innerliner to absorb perspiration and ensure a comfortable fit. Light-weight and adjustable, our Smart Cap is available in 3 sizes. The Cap is made with a premium lead-free material and may be disposed of through normal waste procedures. The disposable Smart Cap blocks up to 95% of radiation.





### **DISPOSABLE THYROID COLLAR**

MODEL	SG-DTHY
CORE MATERIALS	Prolite
THICKNESS	0.125, 0.25*, or 0.50mm LE
CLOSURE	Velcro
SIZING	Regular: 13-16" (neck circ.)
	Large: 17-20" (neck circ.)
CUSTOMIZATIONS	None
FABRIC	Blue SMS
CE	Yes* (only 0.25mm LE)

ScatterGuard's disposable Thyroid Colairs are designed to provide essential protection against scatter radiation. Light-weight and available in 2 sizes, our disposable thyroid collar is made with a premium lead-free material and may be disposed of through normal waste procedures. The disposable Thyroid Collar blocks up to 95% of radiation.





# PEDIATRIC PROTECTION

Pediatric protection in the radiation safety industry is crucial due to the heightened sensitivity of children's developing bodies to ionizing radiation. Their smaller size means that even low doses of radiation can have more significant effects, making the implementation of robust protective measures essential. By tailoring radiation safety apparel specifically for children, our pediatric products offer optimal protection and ensure the lowest radiation dose possible.



### PEDIATRIC TIE APRON



MODEL	AP-TA-CH
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Tie
SIZING	Small: 12 x 24" (Ages 1-3)
	Medium: 14 x 26" (Ages 4-6)
	Large: 16 x 28" (Ages 7-10)
CUSTOMIZATIONS	Embroidery and Logo
COLORS	See fabric colors on pages 33-41
CE	Yes

The Tie Apron is an easy-to-use, affordable option for x-ray protection. Utilizing a tie closure, the Tie Apron's criss crossing straps ensure a secure and comfortable fit. Premium foam padding in the shoulders provides extra comfort.

### PEDIATRIC VELCRO ADJUSTABLE APRON



MODEL	AP-VA-CH
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro
SIZING	Small: 12 x 24" (Ages 1-3)
	Medium: 14 x 26" (Ages 4-6)
	Large: 16 x 28" (Ages 7-10)
CUSTOMIZATIONS	Embroidery and Logo
COLORS	See fabric colors on pages 33-41
CE	Yes

The Velcro Adjustable apron has crisscrossing back straps that provide back support while securing the apron around your waist. Wide back straps prevent the apron from slipping around your shoulder and back area.



### PEDIATRIC HALF APRON



MODEL AP-HA-CH

CORE MATERIALS All Core Types (see page 30)

THICKNESS 0.50 (standard), 0.35, 0.25mm LE

CLOSURE Velcro

SIZING Pediatric: 10" x 10"

CUSTOMIZATIONS Embroidery and Logo

COLORS See fabric colors on pages 33-41

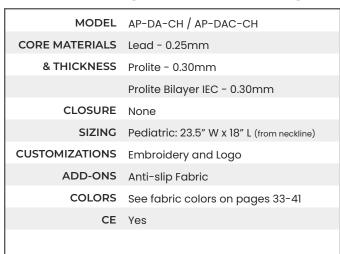
CE Yes

The half apron can provide extra radiation protection. Selling it separate also allows you to mix and match a smaller bottom half with a larger top piece or vice versa.



### PEDIATRIC DENTAL APRON





The Dental apron provides optimal protection during dental procedures and x-rays. The dental apron comes with large hanging straps for easy storage and is available with attached velcro thryoid collar (AP-DAC) or without thyroid collar (AP-DA). Optional anti-slip interior fabric upgrade is also available.



### PEDIATRIC THYROID COLLAR



MODEL	AP-TCO-PD
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Velcro
SIZING	Infant: Custom (Ages 0-1)
	Pediatric: 10" (Ages 2-8)
CUSTOMIZATIONS	Embroidery and Logo
ATTACHMENTS	Loose, Clip, Keyring, Tethered
COLORS	See fabric colors on pages 33-41
CE	Yes

Our Pediatric Thyroid collar is based on the original style and is designed to protect children ages 2 to 8 from harmful x-ray. For ages 9 and up, simply opt for a small thyroid collar (12" neck circumference).



### PEDIATRIC GONAD SHIELD SET



MODEL	AP-GONADSET2
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	VecIro (standard) or Buckle
SIZING	1 Pediatric: 3.75" x 3.75"
	1 Child: 5" x 4"
	1 Small: 5.75" x 4.5"
CUSTOMIZATIONS	Embroidery and Logo
COLORS	See fabric colors on pages 33-41
CE	Yes

The pediatric gonad shield provides essential protection to radiosensitive reproductive organs. Secured via a velcro or buckle closure system, the Gonad shield is sold in 5 individual sizes or as a set of 3.



### PEDIATRIC SCOLIOSIS STOLE



MODEL	AP-STOLE-CH
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
CLOSURE	Buckle
SIZING	Pediatric: 15" x 4.75"
CUSTOMIZATIONS	Embroidery and Logo
COLORS	See fabric colors on pages 33-41
CE	Yes

The scoliosis stole is primarily used for spinal imaging. The shield features velcro panels and an adjustable belt for proper positioning. The neck area does not contain lead, allowing complete visibility of the spine during x-ray, while offering protection to the breast area. This shield is great for scoliosis studies.



### **TUGGA BABY**



Protech's Tugga Baby pediatric glasses provide essential protection during medical fluoroscopy and feature a universal fit with its adjustable headband.

#### **Features:**

Adjustable headband for universal



### **APRON STORAGE**

Protech's high quality garment storage devices are made in the USA from locally sourced raw materials. Each model is carefully designed to provide optimal storage utility and ease of use. We encourage you to properly store your garments in order to prolong their usable life and recommend our premium quality storage products to get the job done!

For best storage practices, please review our storage and care instructions which are found in the beginning of this catalog or review our recommendations below:

- When not in use, garments should be placed on a hanger or stored using Protech's apron storage equipment.
- · Avoid contact with hot surfaces or exposure to direct sunlight.
- Also avoid contact with sharp objects, as these may damage the garment's protective core material.
- For transportation, garments should be carefully rolled up, not folded, and placed into a box or Protech duffle bag.

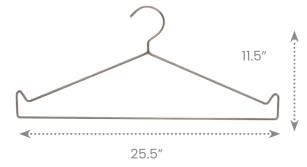


### **APRON HANGER**

MODEL: [AS-HANG]

### CAPACITY: 40LBS

Constructed out of aluminum for durability and longevity this apron hanger is used for the storage of radiation protection aprons. It features hook style ends that are designed to hold lead skirts.



### WIRE STORAGE LOCKER

MODEL: [AS-WLOCK3624]

### CAPACITY: UP TO 15 APRONS

The Wire Storage Locker allows you to keep your garments and other valuables secure with the option of easy transport throughout your facility. The locker features lockable doors (opens a full 270°), 2 Wire Shelves, and a hanging rod (not shown) to easily hang your radiation apparel. The locker is coated with a true powder-epoxy over zinc-chromate electroplating, ensuring a strong, durable finish with excellent handling of extreme temperatures and moisture. NEXGard®, an antimicrobial agent protects the epoxy coating from bacteria, mold, and mildew that causes odors and product degradation. Handles all environmental conditions. Some assembly required.

### **APRON DUFFLE BAG**

MODEL: [AP-DUFFLE]

### **CAPACITY: UP TO 2 APRONS**

Our duffle bag protects your aprons while traveling between facilities or out of the country. Protect and store your aprons for transport now with our affordable, high quality duffle bag. Features: 10" Velcro Opening, Carrying Handle & Shoulder Strap.

For all color options, refer to pages apron fabric color pages.





### MIGHTY MAX RACK

MODEL: [AS-MAX-MOB]

### **CAPACITY: 10 APRONS**

The Mighty-Max mobile apron rack's solid steel design holds up to 10 aprons. The pedestal base has rolling wheels for easy portability. Convenience hooks on each hanger can hold lead skirts.



### **PORTA RACK**

MODEL: [AS-PORTRK]

### **CAPACITY: 8 APRONS**

Ideal for use in the O.R., Specials, and Cath Labs, this portable apron storage unit is great quality and affordable. The 24" wheel base with double casters allows this completely loaded rack to glide smoothly while being moved. The porta rack features moving hanger arms that swing forward and backwards for easy apron selection.



### **Z-RACK**

MODEL: [AS-VALET3]

### CAPACITY: UP TO 20 APRONS

Our Z-Rack is made with heavy duty construction and can hold up to 500 pounds. Large, swivel casters (2 with locking mechanisms) and convenient, nesting design make the Z-rack an excellent portable storage option. The rack provides storage capacity for up to 20 aprons!

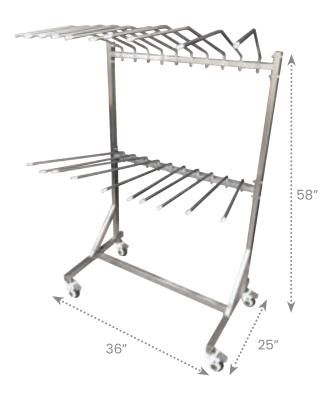


### 2-TIER VALET RACK

MODEL: [AS-VALET2]

### CAPACITY: UP TO 10 APRONS

Industrial quality steel construction and medical-grade casters makes the 2-tier apron racksan excellent portable storage option. The rack provides storage capacity for up to 10 aprons. \*Includes 4 screws for quick assembly







### **VALET RACK**

MODEL: [AS-VALET]

### CAPACITY: UP TO 15 APRONS

Industrial quality steel construction and easy roll casters make these mobile apron racks an excellent portable storage option. The rack provides storage capacity for up to 15 aprons. \*Includes 4 screws for quick assembly

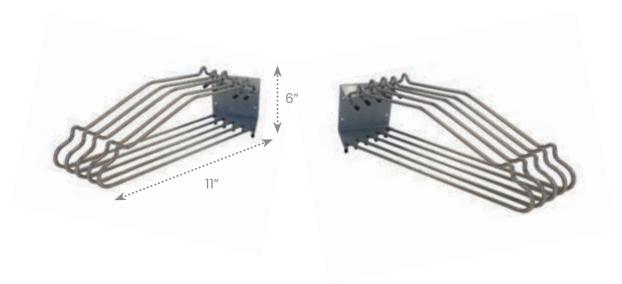


### **WALL RACK**

MODEL: [AS-WALL-L/R]

### CAPACITY: 5 APRONS PER CONSOLE

Prolong the life of your radiation protective garment with our apron wall rack console. Each console holds up to 5 protective aprons with the combined left and right consoles storing up to 10 aprons. The wall console features hooks on the top of the hangers for lead skirts. \*Does not include mounting hardware.



### **PEG RACK**

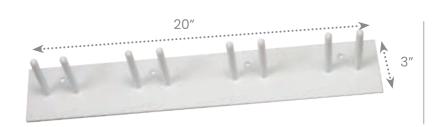
MODEL: [AS-PEG]

### **CAPACITY: 1-10 APRONS**

The apron Peg rack is made of steel construction and easily screws into wall studs. It can store up to 10 aprons but comes in a variety of sizes that accommodate a range of lead aprons. This affordable wall storage for aprons is essential to prolong the life of your protective aprons. \*Mounting hardware is not included.

Example configuration shown: PEG-8

Model	# of Pegs	# of Aprons	Dimensions
PEG-2	2	1	5 x 3"
PEG-4	4	2	10 x 3"
PEG-6	6	3	15 x 3"
PEG-8	8	4	20 x 3"
PEG-10	10	5	25 x 3"
PEG-14	14	7	35 x 3"
PEG-18	18	9	45 x 3"
PEG-20	20	10	50 x 3"



## APCLLC

QUICKSHIP APRONS

The Apollo Quickship line offers high quality, radiation safety apparel ready to ship within 24 hours. All Apollo styles are made with our easy-to-clean, Satinguard antimicrobial fabrics on both the apron's exterior and interior. The frontal and full protection styles also come with a matching, velcro thyroid collar secured via buckle attachment.







### READY TO SHIP IN 24 HOURS

Skip the lead times! Your Apollo apron will be ready to ship in as little as 24 hours.



### ANTIMICROBIAL FABRICS

Apollo aprons are made from our premium, easy-to-clean, antimicrobial Satinguard performance fabric.



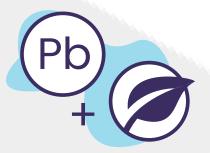
### THYROID COLLAR INCLUDED

Because having a matching thyroid collar to go with your apron is almost as important as protecting your thyroid.



### CUSTOM NAME TAG

Want to personalize your apron? A clear, vinyl sleeve on the apron shoulder holds an embroidered name tag.



### LEAD + LEAD FREE OPTIONS

Whether you need Light Lead or Lead Free core material, we've got you covered.



### NO ORDER FORMS REQUIRED

No complicated paperwork here. Just more free time.

NOTE: To ensure you get your apron as quickly as possible, Apollo aprons are not available in "made-to-measure" sizing or other customizations (with the exception of a name tag).





### **FLEXBACK APRON**

MODEL: APO-FB

0.50mm LE Protection in the Front
Lead, Velcro Thyroid collar included
Available in Prolite and Lead
Features: Elastic Back, Extra Shoulder Padding, Pocket
Sizes: S, M, L, XL, 2XL

### **VEST SKIRT APRON**

MODEL: APO-VS

0.50mm LE Protection in the front
0.25mm LE Protection in the back
Lead, Velcro Thyroid collar included
Available in Prolite and Lead
Features: Buckle sets, Extra Shoulder Padding, Pocket
Sizes: S, M, L, XL







### **DENTAL APRON**

MODEL: APO-DA

0.30mm LE Protection in the front Thyroid collar included Available in Lead Features: Extra Shoulder Padding Sizes: Adult (28" W x 31" L)

### THYROID COLLAR

MODEL: APO-TCS

0.50mm LE Protection

Available in Velcro or Magnetic Closure

Available in Lead

Sizes: S, M, L, XL

Protech Medical is one of the largest US-based leaded eyewear manufacturers in the world. Our licensed opticians handcraft each frame, which are meticulously assembled and inspected with care. Experience expert craftsmanship with our leaded glasses, goggles, fitovers, faceshields, and prescription eyewear available in a variety of affordable and brand name options.



## EYEWEAR

### Handcrafted eyewear made by licensed opticians

Leaded eyewear are intended to be worn by persons who are present in the operating room during medical procedures requiring the use of fluoroscopy. With the increase in occurrences of early onset cataracts and other x-ray induced complications, lead glasses are a staple in fluoroscopic procedures. To accommodate the varying needs of medical personnel, Protech offers several frame styles and brands such as:













## eaded Evewear

### WHY USE LEADED EYEWEAR?

**z** [1] In addition, many studies have suggested that based on epidemiological evidence, cataracts may occur following exposure to lower doses of ionizing radiation than previously believed. [2][3]

A 2015 study concluded that any lens exposure may have associated cataract risk and suggested that interventional radiology work increases probability of cataract development [4]. Employing protective measures such as leaded glasses, patient-supported protective blankets, and suspended ceiling shields have shown to reduce lens doses. In fluoroscopy settings, leaded glasses have been shown to reduce lens doses by a factor of about 2 to 3 (or higher) [5].

[1] Geber, T., Gunnarsson, M. and Mattsson, S. (2011) Eye Lens Dosimetry for Interventional Procedures—Relation between the Absorbed Dose to the Lens and Dose at Measurement Positions. Radiation Measurements, 46, 1248-1251.

[2] Kleiman, N., Cabrera, M., Duran, G., Ramirez, R., Duran, A. and Vano, E. (2009) Occupational Risk of Radiation Cataract in Interventional Cardiology. Investigative Ophthalmology & Visual Science, 49, 4553.

[3] Chodick, G., Bekiroglu, N., Hauptmann, M., et al. (2008) Risk of Cataract after Exposure to Low Doses of Ionizing Radiation: A 20-Year Prospective Cohort Study among US Radiologic Technologists. American Journal of Epidemiology, 168, 620-631.

[4] Seals, K.F., Lee, E.W., Cagnon, C.H., Al-Hakim, R.A. and Kee, S.T. (2016) Radiation-Induced Cataractogenesis: A Critical Literature Review for the Interventional Radiologist. CardioVascular and Interventional Radiology, 39, 151-160.

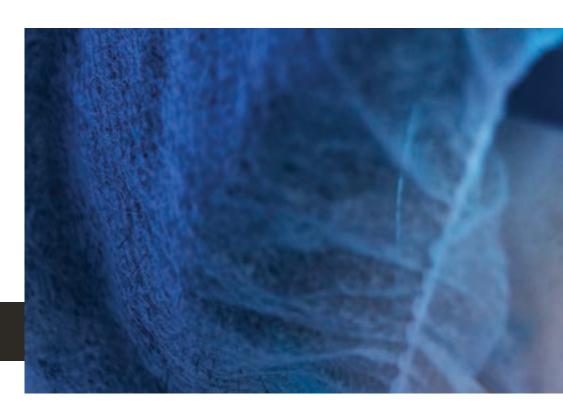
[5] Dauer, L.T., Hamada, N. and Blakely, E.A. (2017) National Council on Radiation Protection and Measurements Commentary Number 26: Impact of Revised Guidance on Radiation Protection for the Lens of the Eye. Journal of the American College of Radiology, 14, 980-982

### ANNUAL DOSE LIMITS

In 2012, the International Commission on Radiological Protection (ICRP) reduced the annual occupational exposure limit from 150mSv to 20mSv averaged over 5 years, with no single year exceeding 50 mSv. The European Union (EU) responded to the new ICRP recommendation by incorporating the new dose limits into the current European basic safety standard.

### PROTECTION SUMMARY

Lead Equivalence - 0.50 or 0.75mm Pb X-ray Tube Voltage - 50 kV - 150 kV IEC 61331-1:2014 Regulation (EU) 2016/425 CE 2895



### WHO USES PROTECTIVE EYEWEAR?

Protective eyewear is used by ~95% of physicians and staff in the following vocations:



CARDIAC CATH



**EP LABS** 



UROLOGY



INTERVENTIONAL RADIOLOGY



PAIN MANAGEMENT



ORTHOPEDIC SURGERY



"The typical interventional cardiologist is exposed to 20 and 30 mSv each year. This level of exposure is nearly 10 times greater than the level of exposure received by the entire body."

-- US National Library of Medicine

### FRAME SIZING

### THE BREAKDOWN



### **EYE SIZE**

Horizontally measured from outermost edges of the lens. Approx 40-62mm.



### **BRIDGE SIZE**

Measurement of the distance between two lenses usually measured at the nose bridge.



### **TEMPLE SIZE**

Measurement of the temple arms that extend from the front of the frame over your ears. The length of your frame's temples is important to ensure stability and comfort.



### **"B" MEASUREMENT**

Measurement of the height of the lenses. \*For Bifocal and Progressive lenses, a B measurement of at least 25mm is recommended.



In the above frame size, the 55 corresponds to "A" (Lens size), the 17 represents "B" (Bridge Size), and 140 is the length of "C" (Temple size). \*"B" Size not specified. NOTE: Not all frame sizes are representative of how a frame will fit. It is always best practice to try a frame on when possible. For instance, the Nike Brazen is a "large frame" based on its frame size, yet it fits a majority of men and women's faces.



### YOUR PERFECT FRAME

WHAT TO LOOK FOR



### 98 SUPERLITE



MODEL	RE-98
FRAME TYPE	Wraparound
FRONT LENS	0.75mm Pb Glass
WEIGHT	63g
FRAME SIZE	63-15-120
MATERIAL	Nylon
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Brown

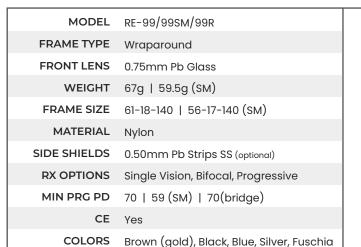
The 98 Superlite is an ultra light-weight frame designed for comfort. Its high curvature provides enhanced lateral/side protection against x-ray. Rubberized temples provide a secure, comfortable fit.

### **Features:**

- Rubberized nose pads and temple
- Lightweight Nylon Frame
- Highly curved lenses for optimal x-ray protection



### 99 ULTRALITE





The 99 Ultralites provide a wide area of protection against x-ray. Their high curvature provide adequate lateral protection which eliminates the need for side shields. The 99 comes in 2 sizes and an optional soft rubber nose bridge for additional support and comfort (99R). (Blue only available in regular size; Fuschia available only in small size).

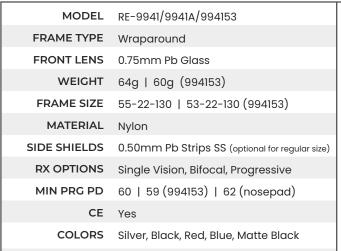
- Rubberized temples for added comfort
- Optional rubberized nosebridge (99R)
- Wide field of view





### 9941 ULTRALITE











The 9941 Ultralites come standard with a rubberized nose bridge. They are designed to offer comfort and provide protection for the entire eye area without the need of additional lead side shields. The 9941 is a popular frame and ideal for those who have a high power prescription. Available in 2 sizes and optional adjustable nose bridge for regular sized frame (9941A).

### **Features:**

- Adjustable nose pads
- Rubberized temples for added comfort
- Ideal for high prescriptions





### **AIRBORNE**

MODEL	RE-AIRB
FRAME TYPE	Wraparound
FRONT LENS	0.75mm Pb Glass
WEIGHT	74.7g
FRAME SIZE	57-21-145
MATERIAL	Polycarbonate
SIDE SHIELDS	0.50mm Pb Strips SS (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	62
CE	Yes
COLORS	Clear/Black

The Airborne is fully loaded with an Asian fit nose bridge, removable facial cavity, and curved lenses for optimal lateral x-ray protection.

- Removable facial cavity foam insert
- **Rubberized Asian Fit Nose Bridge**
- Highly curved lenses for optimal x-ray protection







### **CENTRIST**









The Centrist is a rectangular style safety frame made from high quality nylon and has permanent extended side shields for added x-ray protection. The sleek black with clear insert frame has an adjustable nosepiece that provides comfort and a secure fit.

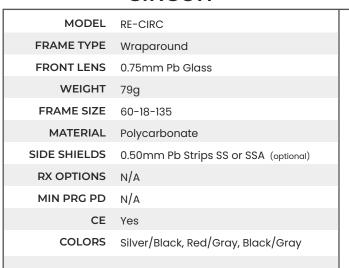
#### **Features:**

- Rubberized & adjustable Asian Fit Nose Bridge
- Extended Side Shields





### **CIRCUIT**



The Circuit frame features wrap-around lenses which maximize lateral protection without the use of side shields. Rubberized temples and nose pads provide excellent comfort and grip. The Circuits modern style combined with its optimized functionality ensure long lasting quality and protection.

- Rubberized temples for grip and comfort
- Versatile fit for all face types
- Wide field of view





### **MAKO**



MODEL	RE-MAKO
FRAME TYPE	Wraparound
FRONT LENS	0.75mm Pb Glass
WEIGHT	69.3g
FRAME SIZE	65-15-130
MATERIAL	Polycarbonate
SIDE SHIELDS	0.50mm Pb Strips SS (included)
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Gray/Green

The Mako frame has highly curved lenses which maximize radiation protection coverage. Integrated side shields equipped with lead strip side shields provide essential lateral x-ray protection.

### **Features:**

- Rubberized nose pads and temples for grip and comfort
- Highly curved frame for optimal x-ray protection
- Integrated lateral side shields



### **MALIBU**





The Malibu frame modernizes the classic wayfarer design and is offered in several tasteful color selections.

### **Features:**

Affordable and fashion forward



### **ONYX**



MODEL	RE-ONYX
FRAME TYPE	Wraparound
FRONT LENS	0.75mm Pb Glass
WEIGHT	71.8g
FRAME SIZE	68-19-135
MATERIAL	Polycarbonate
SIDE SHIELDS	None
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Matte Black, Shiny White

Deep stylistic curves and wide angle lenses combine style with maximum x-ray protection. The Onyx frame features a ventilated nose bridge for better grip, increased comfort, and reduced fogging.

### **Features:**

- Highly curved lenses for optimal x-ray protection
- Rubberized, ventilated nose bridge







### **RAZER**









The Razer blends a sleek design into a lightweight and durable frame. Its premium features such as a ventilated nose bridge, rubberized temples, and wide-angle lenses maximize comfort and protection from x-ray. The modern style and use of light-weight materials make the Razer an excellent choice for longprocedures.

- Ventilated, rubberized nose bridge
- Rubberized Temples for grip and comfort
- Removable 0.50mm LE side shield inserts
- Lightweight frame



# **53 WRAP**







MODEL	RE-53/53A
FRAME TYPE	Classic
FRONT LENS	0.75mm Pb Glass
WEIGHT	84g
FRAME SIZE	58-16-135
MATERIAL	Nylon
SIDE SHIELDS	0.50mm Pb Glass (included)
	or 0.75mm Pb Glass (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	60
CE	Yes
COLORS	Matte Black, Glossy Black, Tortoise

The 53 wrap is constructed of durable nylon that exhibits superior flexibility while minimizing potential breakage. Its full saddle bridge provides maximum comfort and evenly distributes weight over the nose. Available with adjustable nose pads (53A).

#### **Features:**

- Optional adjustable nose pads (53A)
- **Spring Hinge Temples**
- Built-in, glass side shields







# **MODERN METAL**

MODEL	RE-002
FRAME TYPE	Metals
FRONT LENS	0.75mm Pb Glass
WEIGHT	73g
FRAME SIZE	48-20-135
MATERIAL	Optical Steel
SIDE SHIELDS	0.50mm Pb Strips SS (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	58
CE	Yes
COLORS	Gold, Light Gunmetal

The ultra light-weight model 002 features a thin wire frame with optional contoured side shields. Non-slip, silicone nose pads offer easy adjustability and allow the frame to fit a wide variety of face types.

- Optional 0.50mm LE side shields
- Adjustable silicone nose pads
- Versatile fit for all face types





# **METAL AVIATOR**





М	DDEL	RE-003
FRAME	TYPE	Metals
FRONT	LENS	0.75mm Pb Glass
WE	IGHT	82g
FRAME	SIZE	54-17-150
MATE	RIAL	Optical Steel
SIDE SHI	ELDS	0.50mm Pb Strips SS (optional)
RX OPT	IONS	Single Vision, Bifocal, Progressive
MIN PR	G PD	59
	CE	Yes
coı	LORS	Gold

The Aviator frame is a bold edition to our leaded eyewear lineup. Non-slip, silicone nose pads offer easy adjustability and allow the frame to fit a wide variety of face types.

#### **Features:**

- Optional 0.50mm LE side shields
- Adjustable silicone nose pads
- Versatile fit for all face types



# **PETITE METAL**







The model 007 is a classic style made of optical steel with bronze electroplate. Non-slip, silicone nose pads offer easy adjustability and allow the frame to fit a wide variety of face types.

- Optional 0.50mm LE side shields
- Adjustable silicone nose pads
- Versatile fit for all face types



# **CLASSIC METAL**





MODEL	RE-008
FRAME TYPE	Metals
FRONT LENS	0.75mm Pb Glass
WEIGHT	64g
FRAME SIZE	54-19-140
MATERIAL	Optical Steel
SIDE SHIELDS	0.50mm Pb Strips SS (included)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	57
CE	Yes
COLORS	Gold

Available in a beautiful light-blue color, this retro style frame is an aesthetically pleasing option for metal wire frames. The classic metal frame come standard with 0.50mm LE side shields for maximum lateral coverage. Non-slip, silicone nose pads offer easy adjustability and allow the frame to fit a wide variety of face types.

#### **Features:**

- 0.50mm LE side shields Included
- Adjustable silicone nose pads
- Versatile fit for all face types







MODEL	RE-553S
FRAME TYPE	Metals
FRONT LENS	0.75mm Pb Glass
WEIGHT	62g
FRAME SIZE	50-18-140
MATERIAL	Optical Steel
SIDE SHIELDS	0.50mm Pb Strips SS (included)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	57
CE	Yes
COLORS	Silver

The model 553 is a metal frame featuring custom fitted 0.50mm lead strip side shields that create a seal to the front lenses for complete lateral coverage. Its silver color and retro style offer a classic look while non-slip, silicone nose pads provide easy adjustability and allow the frame to fit a wide variety of face types.

- 0.50mm LE side shields included
- Adjustable silicone nose pads
- Versatile fit for all face types





# **557S METALITE**





MODEL	RE-557S
FRAME TYPE	Metals
FRONT LENS	0.75mm Pb Glass
WEIGHT	63g
FRAME SIZE	48-20-135
MATERIAL	Optical Steel
SIDE SHIELDS	0.50mm Pb Strips SS (included)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	56
CE	Yes
COLORS	Gold

The model 557 is a metal frame featuring custom fitted 0.50mm lead strip side shields that create a seal to the fron lenses for complete lateral coverage. Its gold color and retro style offer a classic look while non-slip, silicone nose pade provide easy adjustability and allow the frame to fit a wide variety of face types.

#### **Features:**

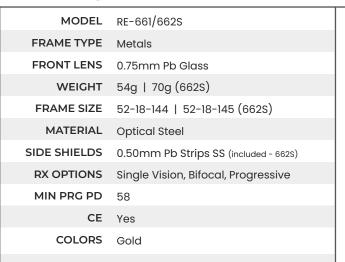
- 0.50mm LE side shields included
- Adjustable silicone nose pads
- Versatile fit for all face types



# **661/662S METALITE**







The model 662 is a metal frame featuring custom fitted 0.50mm lead strip side shields that create a seal to the front lenses for complete lateral coverage. Its gold color and modern shape provide a refreshed look while non-slip, silicone nose pads provide easy adjustability and allow the frame to fit a wide variety of face types.

- 0.50mm LE side shields included
- Adjustable silicone nose pads
- Versatile fit for all face types



# 90 FITOVER



MODEL	RE-90
FRAME TYPE	Fitovers
FRONT LENS	0.75mm Pb Glass
WEIGHT	112g
FRAME SIZE	66-14-120
MATERIAL	Nylon
SIDE SHIELDS	0.50mm Pb Glass (included)
	or 0.75mm Pb Glass (optional)
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Matte Black

Designed to fit over prescription eyewear, model 90 fitovers are an excellent choice for those requiring protection against x-ray and liquid splashes. The large, clear side shields protect the user from lateral exposure while eliminating the "tunnel" effects of look-alikes.

#### **Features:**

- Wide angle field of view
- Large glass side shields help eliminate "tunnel effect"



# FITGUARD ALPHA





MODEL RE-FGUARDA

FRAME TYPE Fitovers

FRONT LENS 0.75mm Pb Glass

WEIGHT 91g

FRAME SIZE 69-17-145

MATERIAL Rubberized Matte Black Finish

SIDE SHIELDS 0.50mm Pb Strips SS (included)

RX OPTIONS N/A

MIN PRG PD N/A

CE Yes

COLORS Matte Black

The Fitguard Alpha fitover is a versatile, high quality nylon frame with blacked-out side shields and a streamlined look. Featuring Flexfit technology, the fitover's temples can be easily adjusted for a secure, comfortable fit. The Alpha (XL) model is ideal for covering wide, rectangular shaped prescription eyewear. With balanced weight distribution and the most coverage, the Alpha is our most popular fitover model.

- Adjustable temples
- Highly durable frame
- Ideal for wide prescription eyewear



# FITGUARD BETA



MODEL	RE-FGUARDB
FRAME TYPE	Fitovers
FRONT LENS	0.75mm Pb Glass
WEIGHT	108g
FRAME SIZE	64-18-150
MATERIAL	Rubberized Matte Black Finish
SIDE SHIELDS	0.50mm Pb Strips SS (included)
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Matte Black

The Fitguard Beta fitover is a versatile, high quality nylon frame with blacked-out side shields and a streamlined look. Featuring Flexfit technology, the fitover's temples can be benched (adjusted) easily for a secure, comfortable fit. The Beta (LG) model is ideal for covering taller, more square shaped prescription eyewear.

#### **Features:**

- Adjustable temples
- Highly durable frame
- Ideal for fitting over eyewear with square or rounded lenses



# **FULL FACE SHIELD**

MODEL	450FPM
FRAME TYPE	Face Shields
FRONT LENS	0.10mm Pb Acrylic
WEIGHT	350g
FRAME SIZE	Adjustable 20" - 25" circumference
MATERIAL	Acrylic, Plastic
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Black/Clear

The Full Face Shield uses a lead impregnated protective acrylic shield suspended from a dual adjustable headpiece. The Full face shield provides maximum x-ray protection due to its larger lead impregnated shield. Because of the multi-adjustable headpiece, you can angle the mask to protect from radiation in many different positions as well as adjust the size to comfortably fit your head. \*Mask should be worn with leaded eyewear protection.





# PANORAMIC FACE SHIELD



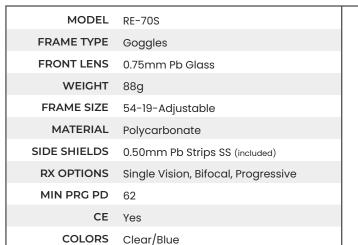
MODEL	400PSM
FRAME TYPE	Face Shields
FRONT LENS	0.10mm Pb Acrylic
WEIGHT	425g
FRAME SIZE	Adjustable 20" - 25" circumference
MATERIAL	Acrylic, Plastic
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Black/Clear

The Panoramic Face Shield utilizes a lead impregnated acrylic shield suspended from a dual adjustable headpiece. This lead face shield provides additional x-ray protection around the sides of the head while sacrificing some front protection. Because of the multi-adjustable headpiece, you can angle the mask to protect from radiation in many different positions as well as adjust the size to comfortably fit your head. \*Mask should be worn with leaded eyewear protection.





# **70 ASTROFLEX**



Impact resistance and flexibility come together in this high quality goggle. The frame features molded side shielding and is fitted to the brow for increased splash protection. The temple length and frame angle are adjustable for a uniform custom fit. Model 70S comes with leaded side shields for necessary lateral x-ray coverage.

- Adjustable temples
- Wide field of view





# COMET ECONOMY





MODEL	RE-COM
FRAME TYPE	Goggles
FRONT LENS	0.75mm Pb Glass
WEIGHT	65g
FRAME SIZE	50-19-117
MATERIAL	Polycarbonate
SIDE SHIELDS	0.50mm Pb Strips SS (included)
	Extended Side shield Seal (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	61
CE	Yes
COLORS	Orange/Black, Yellow/Black, Black

The Comet Economy is an affordable option providing excellent coverage against x-ray. The side shield configuration allows for lead shielding to be placed on the frame exterior and wrap around the entire lens area, providing a complete seal from scatter radiation.

#### **Features:**

- Rubberized nose-fit bridge and temples for grip and comfort
- Foam top bar for added comfort
- Optional Extended side shields
- Wide field of view













A sleek and versatile relative to the Proguard LeadR's frame, the Comet provides excellent coverage against x-ray. Its unique side shield configuration allows for lead shielding to be placed on the frame exterior and wrap around the entire lens area, providing a complete seal from scatter radiation.

- Rubberized nose-fit bridge and temples for grip and comfort
- Foam top bar for added comfort
- Optional Extended side shields
- Wide field of view





# LEAD'R







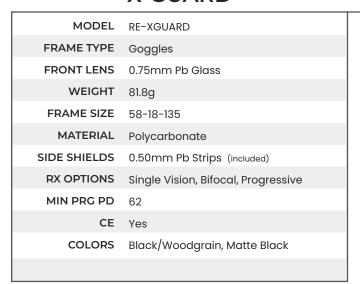


The LeadR's feature a soft, ventilated nose bridge with rubberized temples for premium comfort. Each LeadR's frame comes with the added protection of 0.50mm leaded side shields and the ability to extend that side protection into an additional panel.

#### **Features:**

- Wide field of view
- Rubberized, ventilated nose bridge
- Rubberized, curved temples
- Foam top bar for added comfort
- Optional Extended side shields

# X-GUARD









Tired of the basic goggle selections for radiation protection? So are we! The X Guard goggle features a premium, clear insert, lead strip side shields for lateral coverage (shown in black model below), and tasteful color options.

- Wide field of view
- Removable side shield insert



# **ABACO DOCKSIDE**





MODEL	AB-DOCK
FRAME TYPE	Brand - Abaco
FRONT LENS	0.75mm Pb Glass
WEIGHT	72g
FRAME SIZE	58-19-135
MATERIAL	Polycarbonate
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	63
CE	Yes
COLORS	Black, Crystal Clear

Dockside glasses have a bold square style in an impact-resistant polycarbonate frame featuring premium metal hinges. These fashion forward frames are both durable and lightweight.

#### **Features:**

- Lightweight frame
- Versatile fit for all face types (unisex)











MODEL	AB-JES
FRAME TYPE	Brand - Abaco
FRONT LENS	0.75mm Pb Glass
WEIGHT	68g
FRAME SIZE	56-18-142
MATERIAL	Polycarbonate
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	61
CE	Yes
COLORS	Matte Black

These unisex, universally flattering eyewear are made of soft, lightweight polycarbonate. They feature characteristic rivets at the temples and extremely flexible spring hinges for a snug, comfortable fit.

- Lightweight frame
- Versatile fit for all face types (unisex)





# **ABACO KAI**





MODEL	AB-KAI
FRAME TYPE	Brand - Abaco
FRONT LENS	0.75mm Pb Glass
WEIGHT	65g
FRAME SIZE	56-18-135
MATERIAL	Polycarbonate
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	61
CE	Yes
COLORS	Crystal Clear, Matte Black

Made of shatter-resistant, lightweight polycarbonate, the frames feature premium metal hinges and are molded around the ears to provide a comfortable fit. These unisex sunglasses complement a variety of facial shapes, and they fit virtually all faces from small to large.

#### **Features:**

- Lightweight frame
- Versatile fit for all face types (unisex)

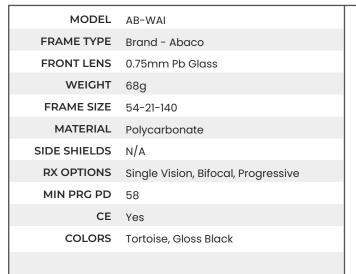




# **ABACO WAIKIKI**







This revived version of an iconic classic features a lightweight polycarbonate frame to provide durability and a comfortable fit. These sunglasses feature characteristic rivet details on the front, premium metal hinges, and they are molded around the ears for added comfort. These eyewear look good on virtually everyone.

- Lightweight frame
- Versatile fit for all face types (unisex)





# **COSTA ALETA**





MODEL	CO-ALE
FRAME TYPE	Brand - Costa
FRONT LENS	0.75mm Pb Glass
WEIGHT	-
FRAME SIZE	54-19-136
MATERIAL	Bioplastics
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	57
CE	Yes
COLORS	Wahoo, Taupe Crystal

Offering performance in a stylish yet functional design, Aleta uses lightweight Bio-Resin and double-injected Hydrolite™ for a better grip. With micro shields and hooding, excess light stays out while fog stays down with vented nose pads.

#### **Features:**

- Rubberized nose pads
- Lightweight and durable plantbased frame (bioplastics)



# **COSTA ARANSAS**





The Aransas features an acetate frame with a classic square lens shape and crafted design elements. This versatile frame fits most face shapes and offers medium coverage.

- High-fit Bridge
- Universal Fit (for most face shapes)





# **COSTA BLACKFIN**





MODEL	CO-BFIN
FRAME TYPE	Brand - Costa
FRONT LENS	0.75mm Pb Glass
WEIGHT	-
FRAME SIZE	62-17-120
MATERIAL	Bioplastics
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Matte Black

Flexible and boasting a Hydrolite™ coinjected lining, the Costa Blackfin lead glasses are made for performance and are a durable option for any doctor.

#### **Features:**

- High-fit Bridge
- Rubberized Nosepads
- Lightweight and durable plantbased frame (bioplastics)

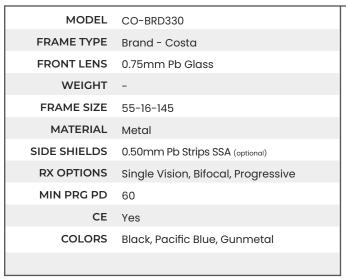








# **COSTA BIMINI ROAD 330**



The Bimini Road features a smaller lens designed to fit those with a narrow head. Classic style designed in titanium and Monel®, these durable, lightweight frames are corrosion-resistant and a reliable choice for anyone.

- Adjustable nose pads
- · Narrow fit for smaller faces
- Temporary Removable Side Shields (optional)
- Lightweight, durable, corrosion resistant frame



# **COSTA BIMINI ROAD 320**





MODEL	CO-BRD320
FRAME TYPE	Brand - Costa
FRONT LENS	0.75mm Pb Glass
WEIGHT	-
FRAME SIZE	53-17-145
MATERIAL	Metal
SIDE SHIELDS	0.50mm Pb Strips SSA (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	59
CE	Yes
COLORS	Black, Pacific Blue, Gunmetal

The Bimini Road features a smaller lens designed to fit those with a narrow head. Classic style designed in titanium and Monel®, these durable, lightweight frames are corrosion-resistant and a reliable choice for anyone.

#### **Features:**

- · Adjustable nose pads
- Narrow fit for smaller faces
- Temporary Removable Side Shields (optional)
- Lightweight, durable, corrosion resistant frame





# **COSTA FERNANDINA**







The Fernandina is a small metal frame with rounded lenses and acetate temples for added color. This unisex frame for smaller faces has premium 5-barrel hinges and adjustable nosepads for added comfort.

- High-fit Bridge
- Narrow fit for smaller faces
- Adjustable Nosepads
- Temporary Removable Side Shields (optional)





# **COSTA OCEAN RIDGE 400**



MODEL CO-OCR4

FRAME TYPE Brand - Costa

FRONT LENS 0.75mm Pb Glass

WEIGHT FRAME SIZE 57-16-140

MATERIAL Bioplastics

SIDE SHIELDS 0.50mm Pb Strips SSA (optional)

RX OPTIONS Single Vision, Bifocal, Progressive

MIN PRG PD 60

CE Yes

COLORS Black, Pacific Blue, Fog Gray

The Ocean Ridge features a lightweight frame made from Bio-Resin™ nylon. The material is strong, allowing the frames to hold their shape in heat and cold weather. This versatile frame fits most face shapes.

#### **Features:**

- Universal Fit (for most face shapes)
- Rubberized Nosepads
- Temporary Removable Side Shields (optional)
- Lightweight and durable plantbased frame (bioplastics)





# **COSTA SEADRIFT**



MODEL	CO-SEA
FRAME TYPE	Brand - Costa
FRONT LENS	0.75mm Pb Glass
WEIGHT	-
FRAME SIZE	60-15-123
MATERIAL	Bioplastics
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Shiny Tortoise Fade

This sleek, Bio-Resin frame sports Costa's Hydrolite™ rubber in the temple arms and nose pads. Providing optimal coverage and wrap, the Seadrift is there when you need to perform.

- High-fit Bridge
- Rubberized Nosepads and temples
- Lightweight and durable plantbased frame (bioplastics)



# **COSTA SULLIVAN**





MODEL CO-SUL

FRAME TYPE Brand - Costa

FRONT LENS 0.75mm Pb Glass

WEIGHT 
FRAME SIZE 53-19-140

MATERIAL Acetate

SIDE SHIELDS 0.50mm Pb Strips SSA (optional)

RX OPTIONS Single Vision, Bifocal, Progressive

MIN PRG PD 56

CE Yes

COLORS Tortoise, Black Kelp, Matte Gray Crystal

Sullivan was designed with a slow-down, kick-back kind of style along with its water-inspired acetate designs. This frame fits all face types and offers medium coverage.

#### **Features:**

- · High bridge fit
- Temporary Removable Side Shields (optional)
- Versatile fit for all face types (unisex)

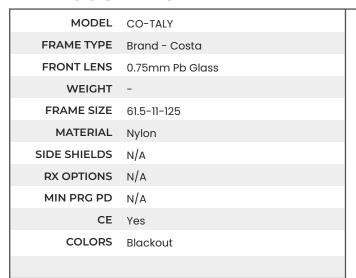




# **COSTA TUNA ALLEY**







With integral hinges, a patented vent system, and durable nylon construction, these men's performance glasses won't be missing much. The Tuna Alley is a large frame offering maximum coverage and wrap.

- Rubberized nose pads
- High bridge and wide fit
- **Durable Nylon Frame**
- Vent System
- Maximum coverage



# **COSTA TYBEE**



MODEL	СО-ТҮВ
FRAME TYPE	Brand - Costa
FRONT LENS	0.75mm Pb Glass
WEIGHT	-
FRAME SIZE	55-20-140
MATERIAL	Acetate
SIDE SHIELDS	0.50mm Pb Strips SSA (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	60
CE	Yes
COLORS	Tortoise, Matte Black, Ocean Currents,
	Shiny Light Gray Crystal

Boasting ocean-inspired colors and a casual style, the Tybee features a standard fit with medium coverage and wrap.

#### Features:

- High-fit Bridge
- Temporary Removable Side Shields (optional)







The Nike 7118 lead glasses are a retrochic, gender-neutral frame made of lightweight, bio-plastic. Featuring rubberized nose pads and temple tips, the 7118 protective eyewear are a comfortable "all-day-wear" option.

- Rubberized nose pads and temple tips
- Temporary Removable Side Shields (optional)
- Lightweight and durable plantbased frame (bioplastics)



# **NIKE BRAZEN**







MODEL	N-BR
FRAME TYPE	Brand - Nike
FRONT LENS	0.75mm Pb Glass
WEIGHT	75g
FRAME SIZE	60-16-140
MATERIAL	Nylon
SIDE SHIELDS	0.50mm Pb Strips SS (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	66 (Min. Single Vision PD: 64)
CE	Yes
COLORS	Matte Black with Blue, Shiny Black

The Nike Brazen features an advanced ventilated nose bridge for grip, comfort, and reduced fogging. Its lightweight nylon design combines streamlined style with enhanced comfort. The premium Nike Brazen frame offers versatility with its superior coverage and protection and fits a wide range of people.

#### **Features:**

- Rubberized, ventilated nose bridge
- · Lightweight frame
- Superior coverage for optimal x-ray protection





# **NIKE BRAZEN FURY**

MODEL	N-BRF
FRAME TYPE	Brand - Nike
FRONT LENS	0.75mm Pb Glass
WEIGHT	-
FRAME SIZE	60-17-130
MATERIAL	Bioplastics
SIDE SHIELDS	0.50mm Pb Strips SS or SSA (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	67
CE	Yes
COLORS	Matte Black with Green, Matte Gray/Blue

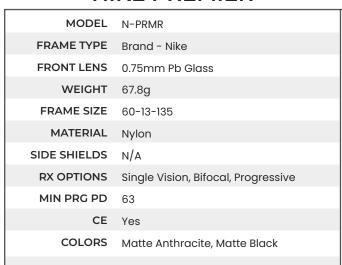
The Nike Brazen Fury features rubberized nose pads and temple tips for added grip and comfort. With super-comfortable features in a lightweight frame, theyre an ideal pair for active and everyday wear.

- Rubberized nose pads and temple tips
- Lightweight and durable plantbased frame (bioplastics)





## **NIKE PREMIER**





The Nike Premier is reborn with a diverse selection of colors and tasteful design elements. The Premier's large rectangular lenses provide adequate x-ray protection and coverage.

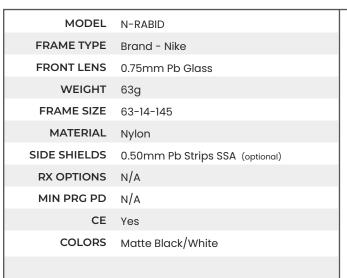
#### **Features:**

- Large, rectangular lenses
- Lightweight frame









The Rabid is a high-curvature sports frame providing superior wraparound coverage and protection. Its lightweight nylon design and wide lenses provides clarity at all angles during any procedure. Secure Wrap Technology features grip zones throughout the frame for a better overall fit, comfort, and stability.

- High curvature frame for wraparound coverage and optimal x-ray protection
- Lightweight frame
- Superior grip for stability and comfort



# **LIBERTY MAXX 30**





MODEL	LBT-MAX30S (small)   LBT-MAX30 (reg.)
FRAME TYPE	Brand - Liberty
FRONT LENS	0.75mm Pb Glass
WEIGHT	60g (small)   69g (reg.)
FRAME SIZE	53-17-130 (small)   55-20-130 (reg.)
MATERIAL	Polycarbonate
SIDE SHIELDS	0.50mm Pb Strips SS (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	56
CE	Yes
COLORS	Shiny Black, Shiny Blue, Shiny Red, Shiny
	Silver

The Liberty Maxx's hingeless temples are ultra-sturdy while the head strap keeps these glasses fitting securely during long procedures. Soft padding inside the temples and bridge ensures maximum comfort and the best possible fit.

#### **Features:**

- Available in 2 sizes
- Hingeless temples for a secure fit
- Can accommodate wide range of prescriptions
- Versatile fit for all face types (unisex)
- Rubberized nose bridge and temples for added comfort and fit









MODEL	LBT-MAX31S (small)   LBT-MAX31 (reg.)
FRAME TYPE	Brand - Liberty
FRONT LENS	0.75mm Pb Glass
WEIGHT	60g (small)   64g (reg.)
FRAME SIZE	53-17-130 (small)   55-20-130 (reg.)
MATERIAL	Polycarbonate
SIDE SHIELDS	0.50mm Pb Strips SS (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	56
CE	Yes
COLORS	Shiny Blue, Shiny Black, Shiny Silver

The Liberty Maxx's head strap keeps these glasses fitting securely during long procedures. Soft padding inside the temples and bridge ensures maximum comfort and the best possible fit.

- Available in 2 sizes
- Shortened temples with a fitted head strap
- Can accommodate wide range of prescriptions
- Versatile fit for all face types (unisex)
- Rubberized nose bridge for comfort







# **OAKLEY CROSSLINK ZERO**





MODEL	OA-CROSS
FRAME TYPE	Brand - Oakley
FRONT LENS	0.75mm Pb Glass
WEIGHT	61.6g
FRAME SIZE	58-16-138
MATERIAL	Durable O Matter™
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	64
CE	Yes
COLORS	Matte Black, Polished Gray Shadow

The Crosslink Zero has fixed temples with a three-Point Fit to ensure lenses are aligned for visual correction. Wire cores hidden inside the temples of this lightweight frame offer adjustability for a perfect fit.

#### **Features:**

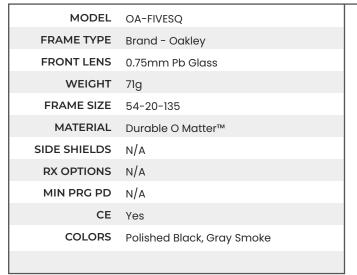
- Rubberized nose pads and ear socks for added comfort
- Lightweight frame





# **OAKLEY FIVE SQUARED**





Oakley Five Squared leaded glasses uses Condensed Cranial Geometry for a tapered architecture that feels as good as it looks and it's a look that soaks sophistication in adrenalin. Dimensional reliefs, metal icons and sculpturally integrated hinges take the whole idea of streetsmooth style and amp it with attitude.

#### **Features:**

Lightweight frame



# **OAKLEY HOLBROOK**



MODEL OA-HOL FRAME TYPE Brand - Oakley FRONT LENS 0.75mm Pb Glass WEIGHT 66.5g **FRAME SIZE** 56-18-135 MATERIAL Durable O Matter™ SIDE SHIELDS N/A **RX OPTIONS** Single Vision, Bifocal, Progressive MIN PRG PD 60 CE Yes COLORS Polished Clear, Satin Black, Matte Brown Tortoise

The Oakley Holbrook frame combine traditional design with modern style ar

#### **Features:**

Lightweight frame

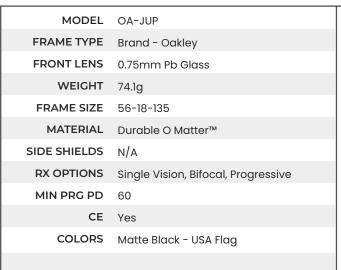


# **OAKLEY JUPITER SQUARED**









A customer favorite, the sporty Jupiter Squared is attitude with refinement. The handles of switchblade knives inspired the earstems and their metal bands and rivets. The Matte Black frames of the Flag Collection are highlighted with American flag emblems.

- Rubberized ear socks for added grip and comfort
- American flag on Oakley "O" Logo





# **OAKLEY LITEBEAM**





MODEL	OA-LITE
FRAME TYPE	Brand - Oakley
FRONT LENS	0.75mm Pb Glass
WEIGHT	59.6g
FRAME SIZE	55-18-140
MATERIAL	Durable O Matter™
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	58
CE	Yes
COLORS	Satin Black

Smooth details and streamlined design provide a timeless look with the Oakley Litebeam. Composed of lightweight materials, the Litebeam features adjustable temples and comes with several nosebridge sizes to ensure maximum comfort.

#### **Features:**

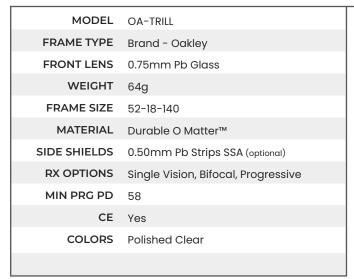
- Lightweight frame
- Adjutable temples for a perfect fit



# **OAKLEY TRILLBE X**







Designed for small to medium faces, this comfortably lightweight addition to the Trillbe™ Collection has a softly rounded front with a sculptured keyhole bridge, and its stem architecture takes vintage style into modern territory.

- Lightweight frame
- Designed for small to medium faces



# **RAY BAN 2016 DADDY-O**





MODEL	RB-2016
FRAME TYPE	Brand - Ray Ban
FRONT LENS	0.75mm Pb Glass
WEIGHT	61g
FRAME SIZE	59-17-125
MATERIAL	Nylon
SIDE SHIELDS	0.50mm Pb Strips SS (optional)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	65
CE	Yes
COLORS	Matte Black

Go 100% classic Ray-Ban with the laid back, classic style of Daddy-O.

#### **Features:**

- Lightweight frame
- Excellent coverage for maximum x-ray protection



# **RAY BAN 4105**









The Ray-Ban Classic Wayfarer look with a twist: the glasses are foldable. Modeled after Ray-Ban's iconic design, the 4105 was reconstructed into a compact, folding, light weight frame.

- Impact resistant, durable nylon
- Compact folding style for ease of portability



# **RAY BAN 4165F JUSTIN**





MODEL	RB-4165
FRAME TYPE	Brand - Ray Ban
FRONT LENS	0.75mm Pb Glass
WEIGHT	73g
FRAME SIZE	55-18-145
MATERIAL	Nylon
SIDE SHIELDS	N/A
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	60
CE	Yes
COLORS	Matte Black

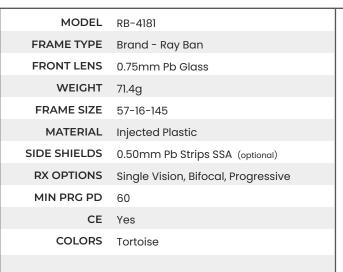
Bold, Fun and Unforgettable, the 4165F glasses may just be one of the coolest looks in the Ray-Ban collection. Inspired by the iconic Wayfarer sunglasses, this style has been redesigned with slightly larger rectangle lenses, fresh new frame colors, and a rubberized frame finish to really give it that extra edge.

#### **Features:**

- Rubberized frame finish for no-slip grip and comfort
- **Durable nylon**



# **RAY BAN 4181**





The stylistically distinct and unassuming Ray Ban model 4181 serves as a timeless option for radiation protection with class.

#### **Features:**

Versatile fit for all face types (unisex)



# **RAY BAN 7047**





MODEL RB-7047

FRAME TYPE Brand - Ray Ban

FRONT LENS 0.75mm Pb Glass

WEIGHT 63g

FRAME SIZE 54-17-140

MATERIAL Injected Plastic

SIDE SHIELDS 0.50mm Pb Strips SSA (optional)

RX OPTIONS Single Vision, Bifocal, Progressive

MIN PRG PD 59

CE Yes

COLORS Black, Blue, Brown

A sharper more self assured Ray Ban style, the model 7047 is full of confidence and style. Composed of lightweight materials, the 7047 provides comfortable, long lasting protection against x-ray.

#### **Features:**

• Wide fit temples for a comfortable fit



# **WILEY-X AIRRAGE**

	_
MODEL	WX-AIRR
FRAME TYPE	Brand - Wiley-X
FRONT LENS	0.75mm Pb Glass
WEIGHT	67.5g
FRAME SIZE	61-18-124
MATERIAL	Polycarbonate
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Matte Black

The Wiley X Airrage frame features a facial foam cavity seal and high curved lenses for maximum comfort and protection against x-ray.

- Facial foam cavity for added comfort
- Highly curved lenses for optimal x-ray protection
- Durable frame



# **WILEY-X BOSS**



MODEL	WX-BOSS
FRAME TYPE	Brand - Wiley-X
FRONT LENS	0.75mm Pb Glass
WEIGHT	84.5g
FRAME SIZE	68-18-125
MATERIAL	Polycarbonate
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Matte Black

Featuring highly curved lenses, the Wiley X Boss provides excellent x-ray protection.

#### Features:

- Removable facial foam cavity seal for added comfort
- Highly curved lenses for optimal x-ray protection
- Durable frame
- Maximum splash protection



**Facial Cavity Seal** 



# **WILEY-X BRICK**



MODEL	WX-BRICK					
FRAME TYPE	Brand - Wiley-X					
FRONT LENS	0.75mm Pb Glass					
WEIGHT	74g					
FRAME SIZE	63-18-120					
MATERIAL	Polycarbonate					
SIDE SHIELDS	N/A					
RX OPTIONS	N/A					
MIN PRG PD	N/A					
CE	Yes					
COLORS	Matte Black					

The Wiley X Brick is part of a long line of military inspired frames with sleek, modern designs. The Wiley X Brick's highly curved 8 base lenses provide excellent coverage against x-ray and feature a removable facial cavity seal to protect against debris and splash exposure.

- Removable facial foam cavity seal for added comfort
- Highly curved lenses for optimal x-ray protection
- Durable frame
- Rubberized, flexible temple arms





# **WILEY-X CONTOUR**



MODEL	WX-CON
FRAME TYPE	Brand - Wiley-X
FRONT LENS	0.75mm Pb Glass
WEIGHT	62.3g
FRAME SIZE	54-17-140
MATERIAL	Nylon
SIDE SHIELDS	0.50mm Pb Inserts SS (included)
RX OPTIONS	Single Vision, Bifocal, Progressive
MIN PRG PD	59
CE	Yes
COLORS	Matte Black, Gloss Black/Brown Stripe

With the move to branded lead glasses, the Wiley X Contour is the whole package. Its retro style and modern color palette deliver on appeal, while optional premium side shield inserts are also available for maximum coverage against x-ray.

#### **Features:**

- Removable 0.50mm side shield inserts included
- Durable, lightweight frame







# WILEY-X P-17

MODEL	WX-P17
FRAME TYPE	Brand - Wiley-X
FRONT LENS	0.75mm Pb Glass
WEIGHT	68g
FRAME SIZE	60-18-125
MATERIAL	Polycarbonate
SIDE SHIELDS	0.50mm Pb Strips SSA (optional)
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Gloss Black, Matte Black, Brown

The Wiley X P-17 is a frame inspired by the military. Its sleek design and lightweight comfort provide unparalleled performance. The Wiley X P-17 is ideal for medium to large facial structures and comes standard with high curvature 0.75mm LE lenses.

- Ideal for medium to large face types
- Highly curved lenses for optimal x-ray protection
- Durable frame



# **TUGGA BABY**



MODEL	RE-BABY
FRAME TYPE	Goggles
FRONT LENS	0.75mm Pb Glass
WEIGHT	42g
FRAME SIZE	46-18
MATERIAL	Polycarbonate
SIDE SHIELDS	N/A
RX OPTIONS	N/A
MIN PRG PD	N/A
CE	Yes
COLORS	Shiny Blue, Shiny Black

Protech's Tugga Baby pediatric glasses provide essential protection during medical fluoroscopy and feature a universal fit with its adjustable headband.

#### Features:

 Adjustable headband for universal fit



# Leaded Eyewear

# EYEWEAR ADDONS

# LATERAL SIDE SHIELDS

Many of our frames come with side shields for maximum protection. There are three types of side shields – glass lenses, side shield attachments (SSA) and vinyl strips added to existing side shield areas (SS). For all side shield types, the standard protection is 0.50mm Pb. Some frames are able to accommodate a 0.75mm Pb glass, such as the 53 Wrap shown here (Fig A.).



# AR COATING

An anti-reflective coating eliminates the reflection produced by light on eyewear lenses. Once an AR coat has been applied, 99.5% of available light will be able to pass through your lenses (compared to 85%) which enhances visual acuity and reduces eye strain. During procedures, an anti-reflective coating is particularly important to reduce the reflections and light disturbances caused by operational and lighting equipment.

# ACCESSORIES



All eyewear purchases come with a hard case, pouch, headstrap and cleaning cloth.



# RE-STRAP2

## ITEM CODE DESCRIPTION

RE-CASE	Honeycomb Hard Case
RE-STRAP	Simple Square Slider Eyewear Strap
RE-STRAP2	Lobster Claw Eyewear Strap
RE-CLEAN	Anti-fog Eyewear Lens Cleaner 1 fl. oz
RE-CLOTH	Soft Eyewear Cloth Wipe

							·					
Model	Size	Base Curve	Weight (g)	Side Shields	CE	Material	Frame Type	Rx	Min. PRO PD	Powers	Included Accessories	
Fitovers												
90 Fitover	66-14-120	4BC 80	112	Incl	Υ	Nylon	Fitover	-	-	-	OEM: C, ST, CL, P	
FitGuard Alpha	69-17-145	4BC 80	91	Incl	Υ	Nylon	Fitover	-	-	-	OEM: C, ST, CL, P	
FitGuard Beta	64-18-150	4BC 80	108	Incl	Υ	Nylon	Fitover	-	-	-	OEM: C, ST, CL, P	
Goggles												
70s Astroflex	54-19-ADJ	4BC 65	88	Incl	Υ	Polycarbonate	Goggle	✓	62	8.00 to -9.00	OEM: C, ST, CL, P	
Comet	59-19-114	6BC 65	78.3	Incl	Υ	Polycarbonate	Goggle	✓	68	8.00 to -9.00	OEM: C, ST, CL, P	
Comet Economy	50-19-117	6BC 65	65	Incl	Υ	Polycarbonate	Goggle	✓	61	8.00 to -9.00	OEM: C, ST, CL, P	
LeadR	58-15-135	6BC 65	76.7	Incl	Υ	Polycarbonate	Goggle	✓	66	8.00 to -9.00	OEM: C, ST, CL, P	
X Guard	58-18-135	6BC 65	81.8	Incl	Υ	Polycarbonate	Goggle	✓	62	8.00 to -9.00	OEM: C, ST, CL, P	
Classic												
53 Wrap	58-16-135	4BC 65	84	Incl	Υ	Nylon	Glasses	✓	60	8.00 to -9.00	OEM: C, ST, CL, P	
Malibu	54-20-155	4BC 65	68.1	N/A	Υ	Polycarbonate	Glasses	✓	57	8.00 to -9.00	OEM: C, ST, CL, P	
Classic Metals												
553s Metalite	50-18-140	4BC 65	62	Incl	Υ	Optical Steel	Glasses	✓	57	8.00 to -9.00	OEM: C, ST, CL, P	
557s Metalite	48-20-135	4BC 65	63	Incl	Υ	Optical Steel	Glasses	✓	56	8.00 to -9.00	OEM: C, ST, CL, P	
661 Metalite	52-18-144	4BC 65	54	N/A	Υ	Optical Steel	Glasses	✓	58	8.00 to -9.00	OEM: C, ST, CL, P	
662s Metalite	52-18-145	4BC 65	70	Incl	Υ	Optical Steel	Glasses	✓	58	8.00 to -9.00	OEM: C, ST, CL, P	
Classic Metal	54-19-140	4 - 6	64	Incl	Υ	Optical Steel	Glasses	✓	57	8.00 to -9.00	OEM: C, ST, CL, P	
Metal Aviators	54-17-150	4 - 6	82	SS	Υ	Optical Steel	Glasses	✓	59	8.00 to -9.00	OEM: C, ST, CL, P	
Modern Metal	48-20-135	4 - 6	73	SS	Υ	Optical Steel	Glasses	✓	58	8.00 to -9.00	OEM: C, ST, CL, P	
Petite Metal	52-22-150	4 - 6	63	SS	Υ	Optical Steel	Glasses	✓	58	8.00 to -9.00	OEM: C, ST, CL, P	
Wrap-Around												
98	63-15-120	8BC 73	63	N/A	Υ	Nylon	Glasses	-	-	-	OEM: C, ST, CL, P	
99 Ultralite	61-18-140	6BC 65	67	SS	Υ	Nylon	Glasses	✓	70	6.00 to -6.00	OEM: C, ST, CL, P	
99 Ultralite Small	56-17-140	6BC 65	59.5	N/A	Υ	Nylon	Glasses	✓	59	8.00 to -9.00	OEM: C, ST, CL, P	
99 Ultralite Bridge	61-18-140	6BC 65	67	SS	Υ	Nylon	Glasses	✓	70	6.00 to -6.00	OEM: C, ST, CL, P	
9941 Ultralite	55-22-130	6BC 65	64	SS	Υ	Nylon	Glasses	✓	60	8.00 to -9.00	OEM: C, ST, CL, P	
9941-53 Ultralite SM	53-22-130	6BC 65	58	N/A	Υ	Nylon	Glasses	✓	59	8.00 to -9.00	OEM: C, ST, CL, P	
9941 UL w Nosepad	55-22-130	6BC 65	64	SS	Υ	Nylon	Glasses	✓	62	8.00 to -9.00	OEM: C, ST, CL, P	
Airborne	57-21-145	4BC 65	74.7	SS	Υ	Polycarbonate	Glasses	✓	62	8.00 to -9.00	OEM: C, ST, CL, P	
Centrist	55-17-140	4BC 65	88	Incl	Υ	Nylon	Glasses	✓	61	8.00 to -9.00	OEM: C, ST, CL, P	
Circuit	60-18-135	8BC 73	82.1	SS/SSA	Υ	Nylon	Glasses	-	-	-	OEM: C, ST, CL, P	
Mako	65-15-130	8BC 73	69.3	Incl	Υ	Polycarbonate	Glasses	-	-	-	OEM: C, ST, CL, P	
Onyx	68-19-135	8BC 73	71.7	N/A	Υ	Polycarbonate	Glasses	-	-	-	OEM: C, ST, CL, P	
Razer	58-17-135	6BC 65	62.5	Incl	Υ	Polycarbonate	Glasses	✓	60	6.00 to -6.00	OEM: C, ST, CL, P	
Kids				N1 / 2				Т	Т	1		
Tugga Baby	46-18	4BC 65	42	N/A	Υ	Polycarbonate	Glasses	-	-	-	OEM: C, ST, CL, P	
Abaco Brand			1 70	21/2	1 1							
Dockside	58-19-135	6BC 65	72	N/A	Υ	Polycarbonate	Glasses	<b>√</b>	63	8.00 to -9.00	OEM: C, ST, CL, P	
Tiki	56-19-145	6BC 65	71	N/A	Υ	Polycarbonate	Glasses	<b>√</b>	61	8.00 to -9.00	OEM: C, ST, CL, P	
Kai	56-18-135	4BC 65	65	N/A	Υ	Polycarbonate	Glasses	<b>√</b>	61	8.00 to -9.00	OEM: C, ST, CL, P	
Jesse	56-18-142	6BC 65	68	N/A	Υ	Polycarbonate	Glasses	<b>√</b>	61	8.00 to -9.00	OEM: C, ST, CL, P	
Waikiki	54-21-140	4BC 65	68	N/A	Υ	Polycarbonate	Glasses	✓	58	8.00 to -9.00	OEM: C, ST, CL, P	

#### **Included Accessories:**

OEM = OEM accessories are provided by Protech or customer designed accessories.

BR = Branded accessories means some or all of the included accessories are supplied by the brand.

# Accessory Types: C = Case

P = Pouch

ST = Straps

CL = Cloth

Model	Size	Base Curve	Weight (g)	Side Shields	CE	Material	Frame Type	Rx	Min. PRO PD	Powers	Included Accessories
Costa Brand											
Aleta	54-19-136	6BC 65	-	N/A	Υ	Bioplastics	Glasses	✓	57	8.00 to -9.00	OEM: C, ST, CL, P
Aransas	58-17-145	6BC 65	-	N/A	Υ	Acetate	Glasses	✓	63	8.00 to -9.00	OEM: C, ST, CL, P
Blackfin	62-17-120	6BC 65	-	N/A	Υ	Bioplastics	Glasses				OEM: C, ST, CL, P
Bimini Road 330	55-16-145	4BC 65	-	SSA	Υ	Metal	Glasses	✓	60	8.00 to -9.00	OEM: C, ST, CL, P
Bimini Road 320	53-17-145	4BC 65	-	SSA	Υ	Metal	Glasses	✓	59	8.00 to -9.00	OEM: C, ST, CL, P
Fernandina	57-15-132	4BC 65	-	SSA	Υ	Metal, Acetate	Glasses	✓	61	8.00 to -9.00	OEM: C, ST, CL, P
Ocean Ridge 400	57-16-140	4BC 65	-	SSA	Υ	Bioplastics	Glasses	✓	60	8.00 to -9.00	OEM: C, ST, CL, P
Seadrift	60-15-123	8BC 73	-	N/A	Υ	Bioplastics	Glasses	-	-	-	OEM: C, ST, CL, P
Sullivan	53-19-140	6BC 65	-	SSA	Υ	Acetate	Glasses	✓	56	8.00 to -9.00	OEM: C, ST, CL, P
Tuna Alley	61.5-11-125	8BC 73	-	N/A	Υ	Nylon	Glasses	-		-	OEM: C, ST, CL, P
Tybee	55-20-140	6BC 65	-	SSA	Υ	Acetate	Glasses	✓	60	8.00 to -9.00	OEM: C, ST, CL, P
Nike Brand							ı				
Brazen	60-16-140	6BC 65	75	SS	Υ	Nylon	Glasses	✓	66	8.00 to -9.00	BR: P; OEM: C, ST, CL
Brazen Fury	60-17-130	6BC 65	73.8	SS/SSA	Υ	Bioplastics	Glasses	✓	67	8.00 to -9.00	BR: P; OEM: C, ST, CL
Premier	60-13-135	6BC 65	67.8	N/A	Υ	Nylon	Glasses	✓	63	8.00 to -9.00	BR: P; OEM: C, ST, CL
Rabid	63-14-145	8BC 73	63	N/A	Υ	Nylon	Glasses	-		-	BR: P ; OEM: C, ST, CL
7118	55-14-140	6BC 65	71.5	N/A	Y	Bioplastics	Glasses	<b>√</b>	54	8.00 to -9.00	BR: P ; OEM: C, ST, CL
Liberty Brand	33 21 210	02000		,		2.00.000	0.00000				,, -
Maxx 30 (small)	53-17-130	6BC 65	60	SS	Υ	Polycarbonate	Glasses	<b>√</b>	56	8.00 to -9.00	OEM: C, ST, CL, P
Maxx 30 (regular)	55-20-130	6BC 65	69	SS	Y	Polycarbonate	Glasses	<b>√</b>	56	8.00 to -9.00	OEM: C, ST, CL, P
Maxx 31 (small)	53-17-130	6BC 65	60	SS	Υ	Polycarbonate	Glasses	<b>√</b>	56	8.00 to -9.00	OEM: C, ST, CL, P
Maxx 31 (regular)	55-20-130	6BC 65	64	SS	Y	Polycarbonate	Glasses	<b>√</b>	56	8.00 to -9.00	OEM: C, ST, CL, P
Oakley Brand	33 20 130	05003				1 Olycar bollate	Glasses			0.00 to 3.00	021111 0, 31, 02, 1
Crosslink Zero	58-16-138	6BC 65	61.6	N/A	Υ	O Matter	Glasses	✓	64	8.00 to -9.00	BR: C, ST, CL
Five Squared	54-20-135	8BC 73	71	N/A	Υ	O Matter	Glasses	-	-	-	BR: C, ST, CL
Holbrook	56-18-135	6BC 65	66.5	N/A	Υ	O Matter	Glasses	✓	60	8.00 to -9.00	BR: C, ST, CL
Jupiter Squared	56-18-135	6BC 65	74.1	N/A	Υ	O Matter	Glasses	✓	60	6.00 to -6.00	BR: P ; OEM: C, ST, CL
Litebeam	55-18-140	4BC 65	59.6	N/A	Υ	O Matter	Glasses	✓	58	8.00 to -9.00	BR: C, ST, CL
Trillbe X	52-18-140	4BC 65	63.9	N/A	Υ	O Matter	Glasses	✓	58	8.00 to -9.00	BR: C, ST, CL
Ray ban Brand				,							
Daddy-O 2016	59-17-125	6BC 65	61	N/A	Υ	Nylon	Glasses	✓	65	6.00 to -6.00	BR: C ; OEM: ST, CL, F
4105	50-23-140	6BC 65	62	N/A	Υ	Metal	Glasses	✓	54	8.00 to -9.00	BR: C, ST, CL
4165F Justin	55-18-145	6BC 65	73	N/A	Υ	Nylon	Glasses	✓	60	8.00 to -9.00	BR: C, ST, CL
4181	57-16-145	6BC 65	71.4	N/A	Υ	Injected Plastic	Glasses	✓	60	8.00 to -9.00	BR: C, ST, CL
7047	54-17-140	4BC 65	63	N/A	Υ	Injected Plastic	Glasses	<b>√</b>	59	8.00 to -9.00	BR: C, ST, CL
Wiley X Brand	3.1,1.0	.5005		,,.		jeoteu : .uotio	0.0000				2 0, 0., 02
Airrage	61-18-124	8BC 73	67.5	N/A	Υ	Polycarbonate	Glasses	-	-	-	BR: C, ST, CL
Boss	68-18-125	8BC 73	84.5			Polycarbonate	Glasses	-	-	-	BR: C, ST, CL
Brick	63-18-120	8BC 73	74	N/A	Υ	Polycarbonate	Glasses	-	-	-	BR: C, ST, CL
Contour	54-17-140	4BC 65	62.3	Incl	Υ	Nylon	Glasses	<b>√</b>	59	8.00 to -9.00	BR: C, ST, CL
P-17	60-18-125	8BC 73	68	N/A	Y	Polycarbonate	Glasses	-		2.22.30 2.00	BR: C, ST, CL
Face Shields / Masks	00 10-123	05073	, ,,	14/ 🗥		7 Orycar Donate	Glasses	<u> </u>	<u>I</u>		DIV. C, 31, CL
450FPM	Adjustable	-	350g	N/A	Υ	Plastic/Acrylic	Mask		_	-	Custom Case
400PSM	Adjustable	-	425g	N/A	Y	Plastic/Acrylic	Mask	-	-	-	Custom Case
Doc # RE.A3 v1-rev15			1236	IN/A	ı	r iastic/ Aci yiic	IVIDSK				Custom Case

#### **Included Accessories:**

OEM = OEM accessories are provided by Protech or customer designed accessories.

BR = Branded accessories means some or all of the included accessories are supplied by the brand.

# Accessory Types: C = Case

P = Pouch

ST = Straps

CL = Cloth

A study by the National Center for Biotechnology Information concluded that: A healthcare worker could receive more than twice the annual limit of radiation exposure simply by holding the head of a trauma patient four times per week with unshielded hands during cervical spine radiography.







# GLOVES

# Highly tactile Radiation Attenuation Gloves

The Proguard family of products comprises the most technically advanced gloves with a 30 year proven record in quality and comfort. Our comprehensive range of gloves has carefully expanded to meet the growing needs of healthcare professionals.

The Proguard glove brand focuses on uniquely balancing tactile sensitivity, protection, and comfort in a way no others can. With a commitment to performance and safety, there is no room for compromise. In addition to our fluoroscopic procedure gloves, we have multiple patient positioning and veterinary glove styles available in various protection options and colors.

# PROGUARD RR







MODEL: [ RR1 | RR2 | RR3 ]

Used during procedures requiring high tactile sensitivity, the Proguard RR radiation attenuation gloves are the industry leaders for protection against x-ray. Designed and produced in a modern manufacturing facility, our premium quality gloves are powder free, latex free, and sterile. The Proguard RR gloves blend premium comfort and optimal protection at an affordable cost.



COMPOSITION	STERILIZED	LATEX	POWDER	FDA	CE
Lead Oxide	Ethylene Oxide	No	No	PPE	Yes
Dry Natural Rubber					

Models	60 kVp	90 kVp	120 kVp	Area Density	Thickness
RR1	45%	33%	26%	0.45 kg/m²	0.24mm ± 0.02mm
RR2	52%	40%	32%	0.63 kg/m <sup>2</sup>	0.28mm ± 0.02mm
RR3	60%	47%	39%	0.63+ kg/m <sup>2</sup>	0.38mm ± 0.02mm

### Certified to ASTM 2547 and IEC 61331-1:2014 Standards

#### SIZING INFORMATION

• 6	-	RR160	RR260	RR360	• 8	-	RR180	RR280	RR380
• 6.5	-	RR165	RR265	RR365	• 8.5	-	RR185	RR285	RR385
• 7	-	RR170	RR270	RR370	• 9	-	RR190	RR290	RR390
• 7.5	-	RR175	RR275	RR375	• 9.5	-	RR195	RR295	RR395



Latex Free/ Hypoallergenic **Premium** Lead



**High Tactile** Sensitivity





Slip Coat **Technology** 



Single Use Only



### PROGUARD RR SLEEVE

MODEL: [RR-SLV]

COMPOSITION	STERILIZED	LATEX	POWDER	FDA	CE
Lead Oxide Dry Natural Rubber	Ethylene Oxide	No	No	PPE	No

Models	60 kVp	90 kVp	120 kVp	Area Density	Thickness
RR-SLV	52%	40%	32%	0.63 kg/m <sup>2</sup>	0.28mm ± 0.02mm

The Proguard RR radiation reducing sleeve is latex free, powder free and sterile. Composed of lead oxide, these sleeves offer complete arm protection when used in conjunction with radiation attenuating gloves (pictured with the Proguard RR below). For best use, tuck the RR sleeve into your radiation safety gloves. Sold by the pair and available in 3 sizes.

#### Certified to ASTM 2547 and IEC 61331-1:2014 Standards

#### SIZING INFORMATION

- Small (RR-SLV-SM) Approx. dimensions: 15.5" L x 7" W [3.75" at base; 5" at top]
- Medium (RR-SLV-MD) Approx. dimensions: 15.5" L x 7.5" W [4" at base; 5" at top]
- Large (RR-SLV-LG) Approx. dimensions: 15.5" L x 8" W [4.75" at base; 5.5" at top]







Premium c Lead



Single Use Only



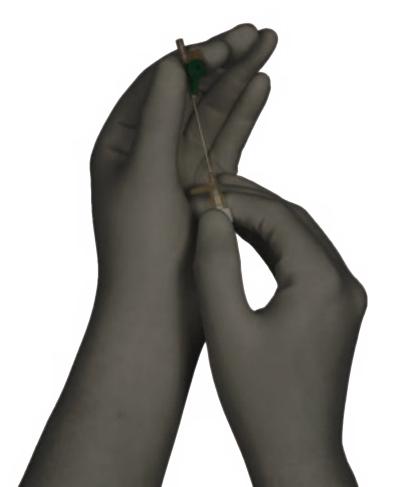
# Attenuation Gloves

## PROGUARD ELITE



#### MODEL: [E1 | E2]

The Proguard Elite is composed of a lead-free bismuth formula blended with premium polyisoprene and a proprietary polymer matrix free of harmful chemicals (MBT and DPG). The Proguard Elite gloves are intended to reduce the amount of scattered radiation exposure to the hands during fluoroscopic procedures. Proguard gloves are powder-free Personal Protective Equipment and are sterile unless opened or damaged.



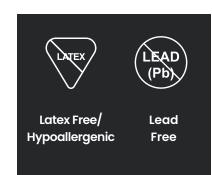
COMPOSITION	STERILIZED	LATEX	POWDER	FDA	CE
Bismuth (Lead Free)	Ethylene Oxide	No	No	PPE	Yes
Polyisoprene					

Models	60 kVp	90 kVp	120 kVp	Thickness
El	45%	33%	26%	0.24mm ± 0.03mm
E2	52%	40%	32%	0.28mm ± 0.03mm

#### Certified to ASTM 2547 and IEC 61331-1:2014 Standards

#### SIZING INFORMATION

• 6	-	E160	E260	• 8	-	E180	E280
• 6.5	-	E165	E265	• 8.5	-	E185	E285
• 7	-	E170	E270	• 9	-	E190	E290
• 7.5	-	E175	E275	• 9.5	-	E195	E295









**High Tactile** Sensitivity

Slip Coat Technology

Single Use Only



# PROGUARD PLUS

MODEL: [PG1]

COMPOSITION STERILIZED LATEX POWDER FDA CE

Lead Oxide Ethylene Oxide No No PPE Yes

Polyisoprene

Models	60 kVp	80 kVp	100 kVp	120 kVp	Thickness
PG1	46%	37%	30%	24%	0.24mm ± 0.03mm

#### Certified to ASTM 2547 and IEC 61331-1:2014 Standards

#### SIZING INFORMATION

• 6 -	PG160	PG260	•8 -	PG180	PG280
• 6.5 -	PG165	PG265	• 8.5 -	PG185	PG285
•7 -	PG170	PG270	• 9 -	PG190	PG290
• 7.5 -	PG175	PG275	• 9.5 -	PG195	PG295









High Tactile Sensitivity Te

Slip Coat Technology

Single Use Only

The Proguard Plus achieves surgical grade performance by combining the quality and characteristics of the original Protech Proguard glove with premium, latex-free polyisoprene. Rich textures, versatile grip, and maximum protection provide unrivaled tactile sensitivity and security.



#### ANGIOGRAPHIC LEAD GLOVE



MODEL AP-ANGIO

CORE MATERIALS Lead

THICKNESS OPTIONS 0.50mm LE (standard) or 0.25mm LE

OUTER MATERIAL Black Leatherette

SIZING One size fits all

DIMENSIONS 14.5" L x 6.5" W (base) 5"W (hand)

WEIGHT 2.1 lbs each glove

CUSTOMIZATIONS None

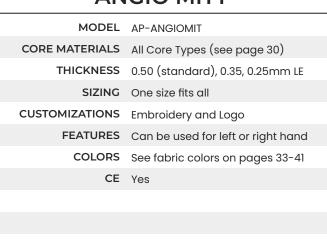
FEATURES Sold as a pair

CE Yes

The Angiographic Lead Glove is mainly used in patient positioning but is also ideal for procedures involving high radiation exposure. The glove is soft, flexible, and can easily be wiped clean.



#### **ANGIO MITT**





Our Angio Mitt is part of a wide selection of radiation shielding accessories. The angio mitt is a flexible mitt used to shield the hand, thus reducing exposure under direct x-ray. This mitt can be used on either the right or left hand and is mainly used in positioning.



#### **SLITT MITT**



MODEL	AP-SLITMIT-L/R
CORE MATERIALS	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
SIZING	One size fits all
CUSTOMIZATIONS	Embroidery and Logo
FEATURES	Must specify left or right hand
COLORS	See fabric colors on pages 33-41
CE	Yes

Our slit mitt is part of a wide selection of radiation shielding accessories. This flexible glove has a lead protective sheet for the top part of your hand and a slit on the bottom to allow for gripping.



# MADE IN THE USA



# BARRIERS, DRAPES & SHIELDS

Protech manufacturers a comprehensive line of x-ray protective barriers, windows, and other leaded shield products. From fully custom lead doors to unique windows and overhead barriers, Protech has the expertise to meet your needs.

In line with our commitment to quality, most Protech barriers and components (acrylic, aluminum/steel) are made in the USA.

We also offer Scatterguard, a line of disposable products that protect doctors and technicians from the harmful effects of exposure to radiation while reducing the occurrence of biological contamination. ScatterGuard is comprised of disposable Patient Drapes, Caps and Thyroid Collars.

#### **FULL ACRYLIC MOBILE BARRIER**

MODEL	MB-FULL
COMPOSITION	Lead Acrylic
PROTECTION (ACRYLIC)	0.50mm LE
PROTECTION (BASE)	0.50mm LE (standard)
WINDOW DIMENSIONS	55" H x 28" W
FULL DIMENSIONS	72" H x 28" W
CE	No

Diagnostic x-ray procedures frequently require working personnel to remain in the examination room where they are subject to exposure from secondary radiation. The clear leaded acrylic barrier can provide total-body x-ray shielding during extended procedures. Our clear acrylic barrier provides 0.50mm LE protection and rests on an opaque lower panel with an equivalent 0.50mm LE. Smooth-rolling casters give the barrier great mobility. The acrylic lead barrier is shipped unassembled but can be easily assembled using a screwdriver and wrench. For heavy duty radiation protection barriers please see our CORNING lead glass barriers.

#### HALF ACRYLIC MOBILE BARRIER

MODEL	MB-HALF
COMPOSITION	Lead Acrylic
PROTECTION (ACRYLIC)	0.50mm LE
PROTECTION (BASE)	0.50mm LE (standard)
WINDOW DIMENSIONS	24" H x 28" W
FULL DIMENSIONS	72" H x 28" W
CE	No

Diagnostic x-ray procedures frequently require working personnel to remain in the examination room where they are subject to exposure from secondary radiation. The clear leaded acrylic barrier can provide total-body x-ray shielding during extended procedures. Our clear acrylic barrier provides 0.50mm LE protection and rests on an opaque lower panel with an equivalent 0.50mm LE. Smooth-rolling casters give the barrier great mobility. The acrylic lead barrier is shipped unassembled but can be easily assembled using a screwdriver and wrench. For heavy duty radiation protection barriers please see our CORNING lead glass barriers.



#### **FULL GLASS MOBILE BARRIER**

ı		
	MODEL	MB-FULL-GL
	COMPOSITION	Lead Glass
	PROTECTION (GLASS)	2.00mm
	PROTECTION (BASE)	0.50mm LE (standard)
	WINDOW DIMENSIONS	53" H x 26" W
	FULL DIMENSIONS	77" H x 32.5" W x 28.5" D
	CE	No
П		

Diagnostic x-ray procedures frequently require working personnel to remain in the examination room where they are subject to exposure from secondary radiation. The clear, lead glass barrier can provide total-body x-ray shielding during extended procedures. Our lead glass provides 2.00mm LE protection and rests on an opaque lower panel with an equivalent 0.50mm LE. Medical-grade casters give the barrier great mobility. The glass lead barrier is shipped fully assembled.

#### HALF GLASS MOBILE BARRIER

117 (21 02) (3	o mobile by man
MODEL	MB-HALF-GL
COMPOSITION	Lead Glass
PROTECTION (GLASS)	2.00mm LE
PROTECTION (BASE)	0.50mm LE (standard)
WINDOW DIMENSIONS	22" H x 26" W
FULL DIMENSIONS	77" H x 32.5" W x 28.5" D
CE	No

Diagnostic x-ray procedures frequently require working personnel to remain in the examination room where they are subject to exposure from secondary radiation. The clear, lead glass barrier can provide total-body x-ray shielding during extended procedures. Our lead glass provides 2.00mm LE protection and rests on an opaque lower panel with an equivalent 0.50mm LE. Medical-grade casters give the barrier great mobility. The glass lead barrier is shipped fully assembled.



#### **ADJUSTABLE BARRIER**

MODEL MB-ADJ

CORE MATERIAL All Core Types (see page 30)

THICKNESS 0.50 (standard), 0.35, 0.25mm LE

DIMENSIONS 24" W x 48" H

HEIGHT ADJUSTMENT 24" to 48" H

CE No

COLORS See fabric colors on pages 33-41

Our adjustable mobile radiation barrier provides maximum shielding from x-ray exposure. Ideal for patient & personnel radiation protection our lead shield is easy to maneuver, and much lighter than the full & half acrylic barriers. This enables greater mobility while maintaining a solid construction with high quality, durable wheel casters. You can also customize your barrier with your company's logo or embroidery.

Velcro-lined for improved adjustability!



#### **PORTA SHIELD**

MODEL	MB-PORTA
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
DIMENSIONS	24" W x 24" H (shield)
HEIGHT ADJUSTMENT	34" - 60" (stand height)
CE	No
COLORS	See fabric colors on pages 33-41

The porta shield is a mobile-adjustable lead shield that provides a variety of different adjustable heights blended with a lightweight design. The "H" shaped wheels provide stability and portability. The shield is attached by velcro which enables easy removal for cleaning.

#### **CUSTOM SIZING AVAILABLE**



#### **GRADUATED PORTA SHIELD**

MODEL	MB-PORTA-GRAD
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
DIMENSIONS	24" W x 17-36" H (shield)
HEIGHT ADJUSTMENT	34" - 60" (stand height)
CE	No
COLORS	See fabric colors on pages 33-41

The graduated porta shield is similar to the porta shield but differentiates itself with its individual lead flaps. The flaps provide excellent versatility and usage. They are attached by velcro which enable easy removal for cleaning.



#### **PROGUARD T2 BARRIER**

MODEL	MB-T2
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	1.00mm panels (2.00mm at overlap)
DIMENSIONS	36" W x 21" D x 43-52" H
HEIGHT ADJUSTMENT	43" - 52"
CE	No
COLORS	See fabric colors on pages 33-41

The Proguard T2 Mobile Adjustable Barrier features medical grade casters with locking mechanisms for easy maneuverability. The adjustable, aluminum frame is made in the USA. Offering maximum protection, the top and bottom panels are made with 1.00mm lead, giving you 2.00mm protection at overlap. Each panel is attached by velcro, allowing for easy removal for cleaning.



Barriers, Shields and Drapes

#### SINGLE-SIDED TABLE DRAPES

MODEL	SEE BELOW
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
DIMENSIONS	See below
CUSTOMIZATIONS	Embroidery and Logo
CE	No
COLORS	See fabric colors on pages 33-41

Protech's high quality drapes provide protection against scatter radiation for your lower body and are specially designed to not obstruct positioning of the C-arm. The single sided table drape uses Velcro strips to adhere to the side of your imaging table. Each panel is 6 inches wide. While table drapes are made standard with Lead core material at 0.50mm LE thickness, we do accommodate custom requests!

Drape Dimensions	# of Panels	Model (SINGLE-SIDED)
22" x 30"	4	TA-TS2230
24" x 24"	4	TA-TS2424
24" x 30"	4	TA-TS2430
24" x 36"	4	TA-TS2436
24" x 42"	4	TA-TS2442
30" x 24"	5	TA-TS3024
30" x 30"	5	TA-TS3030
30" x 36"	5	TA-TS3036
30" x 42"	5	TA-TS3042
36" x 24"	6	TA-TS3624
36" x 28"	6	TA-TS3628
36" x 30"	6	TA-TS3630
36" x 36"	6	TA-TS3636
36" x 42"	6	TA-TS3642
48" x 24"	8	TA-TS4824
48" x 28"	8	TA-TS4828
48" x 30"	8	TA-TS4830
48" x 32"	8	TA-TS4832
48" x 36"	8	TA-TS4836
48" x 42"	8	TA-TS4842



#### **DOUBLE-SIDED TABLE DRAPES**

MODEL	SEE BELOW
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
DIMENSIONS	See below
CUSTOMIZATIONS	Embroidery and Logo
CE	No
COLORS	See fabric colors on pages 33-41

Protech's high quality drapes provide protection against scatter radiation for your lower body and are specially designed to not obstruct positioning of the C-arm. The double-sided drape features a saddlebag design for a secure fit to any style imaging table. Each panel is 6 inches wide. While table drapes are made standard with Lead core material at 0.50mm LE thickness, we do accommodate custom requests!

Drape Dimensions	# of Panels (ea. side)	Model (DOUBLE-SIDED)
24" x 24"	4	TA-TD2424
24" x 30"	4	TA-TD2430
24" x 36"	4	TA-TD2436
24" x 42"	4	TA-TD2442
30" x 24"	5	TA-TD3024
30" x 30"	5	TA-TD3030
30" x 36"	5	TA-TD3036
30" x 42"	5	TA-TD3042
36" x 24"	6	TA-TD3624
36" x 28"	6	TA-TD3628
36" x 30"	6	TA-TD3630
36" x 36"	6	TA-TD3636
36" x 42"	6	TA-TD3642
48" x 24"	8	TA-TD4824
48" x 28"	8	TA-TD4828
48" x 30"	8	TA-TD4830
48" x 32"	8	TA-TD4832
48" x 36"	8	TA-TD4836
48" x 42"	8	TA-TD4842



#### **LEAD BLANKET**

MODEL	SEE BELOW
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
DIMENSIONS	See below
CUSTOMIZATIONS	Embroidery and Logo
CE	No
COLORS	See fabric colors on pages 33-41

Lead blankets are used for a variety of procedures. We offer 4 standard sizes, but we can easily accommodate any custom size request.

Dimensions	Model
18" x 24"	BL-1824
24" x 24"	BL-2424
24" x 36"	BL-2436
24" x 42"	BL-2442



#### **ANESTHESIA FRONT PANEL**

MODEL	SEE BELOW
CORE MATERIAL	All Core Types (see page 30)
THICKNESS	0.50 (standard), 0.35, 0.25mm LE
DIMENSIONS	See below
CUSTOMIZATIONS	Embroidery and Logo
CE	No
COLORS	See fabric colors on pages 33-41

The anesthesia panel, unlike other table drapes, is a solid panel designed to fit any style imaging table by the head or feet of the patient. Secured via velcro closures, it provides protection against scatter radiation for your lower body and is designed to not obstruct positioning of the C-arm.

Dimensions	Model
22" x 24"	TS-FP-2224
22" x 26"	TS-FP-2226
22" x 28"	TS-FP-2228
22" x 32"	TS-FP-2232
22" x 36"	TS-FP-2236
24" x 24"	TS-FP-2424
24" x 36"	TS-FP-2436



MODEL	MB-MOB-01
MATERIAL	Acrylic
PROTECTION	0.50mm LE (standard)
WINDOW SIZE	31.5" L x 23.6" W x 0.5" H
CURTAIN SIZE	N/A
CE	No
SPECIAL	Square Arm

Our unique line of mobile overhead barriers provide flexibility and versatility for a variety of procedures. Made from high quality steel and acrylic, our specialty mobile barriers roll on premium casters. Protech's specialty mobile acrylic barriers possess high quality suspension for proper swivel motion. A well engineered configuration allows for lightweight movement, enhanced stability and a small foot-print.

#### **OVERHEAD BARRIER SQUARED W/ CURTAIN**

MODEL	MB-MOB-02
MATERIAL	Acrylic
PROTECTION	0.50mm LE (standard)
WINDOW SIZE	15.75" L x 23.6" W x 0.5" H
CURTAIN SIZE	13.78" L x 23.6" W
CE	No
SPECIAL	Square Arm

Our unique line of mobile overhead barriers provide flexibility and versatility for a variety of procedures. Made from high quality steel and acrylic, our specialty mobile barriers roll on premium casters. Protech's specialty mobile acrylic barriers possess high quality suspension for proper swivel motion. A well engineered configuration allows for lightweight movement, enhanced stability and a small foot-print.





# Barriers, Shields and Drapes

# SCATTERGUARD<sup>ActiV</sup> PATIENT DRAPES

ScatterGuard Patient Drapes protect surgeons and technicians from the harmful effects of scatter radiation during surgical procedures without any added weight.

Our lead-free, latex-free drapes are uniquely designed to provide tailored coverage for a variety of procedures. Scatterguard drapes are made from our Prolite core material which is specially formulated to provide over 20% more protection at higher exposures than the competition. The drape exterior features our highly-absorbant ActiV material with a plastic, laminated inner layer. In addition, high quality 3M adhesive ensures secure positioning of the drape.

#### **ABSORBANCY**

Fabric Type	Weight	Absorbancy Rate (sec/ml)	Absorbant Capacity
Leading Competitor 1	109 gsm	1.9 sec/ml	526%
Leading Competitor 2	130 gsm	2.5 sec/ml	600%
ActiV Absorbant	120 gsm	1.2 sec/ml	620%

#### PROTECTION PROPERTIES

Lead Equivalence	0.060mm	0.125mm	0.25mm*	0.375mm
Attenuation at 90kVp	50%	75%	90%	95%+

\*Certified to ASTM 2547-18 and IEC 61331-1:2014 Standards [CE 2895]



DISPOSABLE



ATEX FREE



3M ADHESIVI



**ECO-FRIENDLY** 



ABSORBAN



STERILE



## **SCATTER RADIATION**

#### SCATTER VERSUS DIRECT BEAM RADIATION

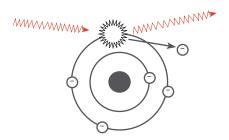
Image intensifiers have enabled surgeons to become technically more proficient and decrease the morbidity of the patient by minimizing area of operative field and decreasing operative time. Some over-use fluoroscopy, forgetting the principles of radiation protection, while others under-use it due to unfounded fears. In general, surgeons lack awareness about the radiation exposure they are getting and its effects on health.

#### SCATTER RADIATION

These X-ray photons remove an outer shell electron from its orbit, thereby ionizing the atom. Low energy radiation interacts with body tissue then scatters in different directions.

#### **LOW ENERGY - SCATTERED**

Compton Effect

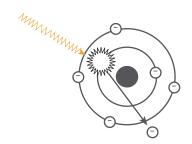


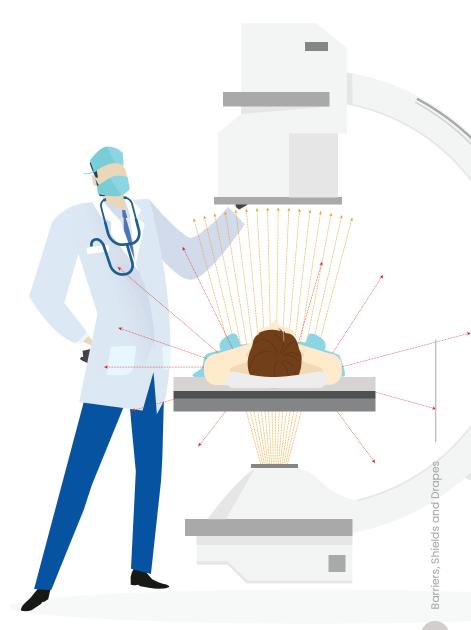
### DIRECT BEAM RADIATION

These X-ray photons carry enough energy to eject an inner shell electron from its orbit. The High energy radiation penetrates and passes through the patient for imaging.

#### **HIGH ENERGY - ABSORBED**

Photoelectric Effect





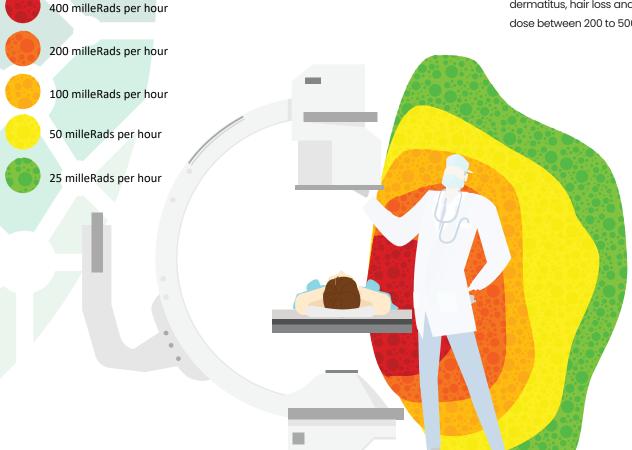
#### THE DANGERS OF SCATTER RADIATION

During procedures requiring fluoroscopy, direct beam radiation contacts a patient and "scatters" towards the surgeon and other personnel. This means surgeons and assistants are at maximum risk due to proximity to exposure area. "The scattered radiation from the patient comprises the main source of radiation dose to staff."

[1]

According to the National & International Conferences on Radiation Protection (ICRP & NCRP), "Lens/Eye Dose should be limited to 15 RADs per year." Based on an average Lens/Eye Dose of 62 milleRads per hour and an average of 576 hours of Fluoroscopy per year some clinicians are receiving doses of 35.7 RADs per year. In a 30 year career this amounts to 1,071 RADs, if the operator is standing upright; far more if crouched or seated (about 5,184 RADs).

The energy absorbed from ionizing radiation can cause cataracts, tumors, skin dermatitus, hair loss and germ cell mutations. In fact, "Cataracts occur with cumulative dose between 200 to 500 RADS." [2].



#### LONG STORY SHORT...

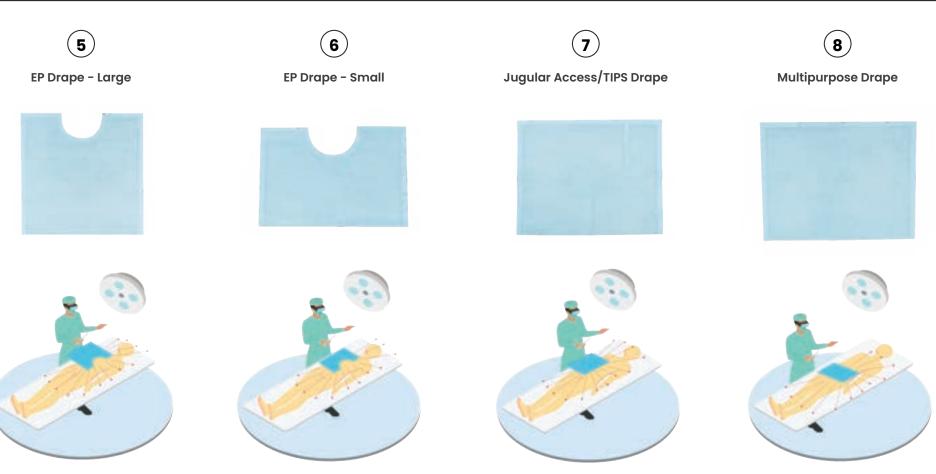
A SIR published study concluded "...leaded glasses and scatter-draping drapes substantially reduced lens dose by factors of 9.5 and 12 respectively. Maximal eye drapeing was achieved by the use of both leaded glasses and scatter-draping drapes." [3]

- [1] International Atomic Energy Agency
- [2] National & International Conferences on Radiation Protection
- [3] Drs. Dauer & Thorton, Memorial Sloan Kettering Medical Center, Society of Interventional Radiology 2009

#	Model	Description	Fenestration	Dimensions	Procedures
1	SG-AD-060/125/250/375	Angiography Drape	2" Circle	14.5" x 16.5"	Angiography, Coronary Catheterization, UFE, Pelvic Surgery and TACE
2	SG-BD-125/250/375	Biliary Split Drape	5" Slit	14.5" x 16.5"	Transjugular intraheptic portosystematic shunt (TIPS)
3	SG-DSD-125/250/375	Dialysis Drape	4.5" x 9" Rectangle	32" x 50"	Dialysis access and declotting, Fistulagram
4	SG-EPD-125/250/375	EP Left Subclavian Drape	3.25" x 2.25" Scoop	13.5" x 17.5"	Bi-ventricular pacemaker implants, Bi-ventricular pacing & ICS procedures

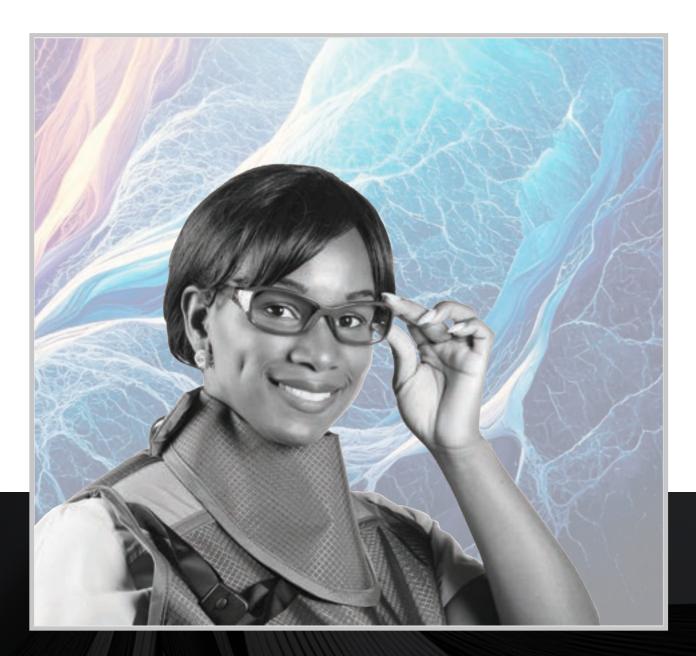


#	Model	Description	Fenestration	Dimensions	Procedures
5	SG-EPDC-LG-250	EP Drape - Large	5.75" x 3" Scoop	16" x 16"	Bi-ventricular pacemaker implants, Bi-ventricular pacing and ICS procedures
6	SG-EPDC-SM-250	EP Drape - Small	5.75" x 3" Scoop	11" x 16"	Bi-ventricular pacemaker implants, Bi-ventricular pacing and ICS procedures
7	SG-JUG-125/250/375	Jugular Access/ TIPS Drape	5″ Slit	13.5" x 17.5"	Transjugular intraheptic portosystematic shunt (TIPS)
8	SG-MPD-060/125/250/375	Multipurpose Drape	None	13.5 x" x 17.5"	Needle Biopsy or Puncture procedures



#	Model	Description	Fenestration	Dimensions	Procedures
9	SG-MPDF-060/125/250/375	Multipurpose Drape w/ Fenestration	3.5" x 2" Rectangle	13.5″ x 17.5″	Needle Biopsy or Puncture procedures
10	SG-PPD-125/250/375	Peripheral Drape	None	12" x 35"	Peripheral procedures w/ access through the femoral artery
11	SG-DCAP-060/125/250/500	Disposable Smart Cap	N/A	SM, MD, LG	Any procedure involving fluoroscopy
12	SG-DTHY-125/250/500	Disposable Thyroid Collars	N/A	Regular, Large	Any procedure involving fluoroscopy





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