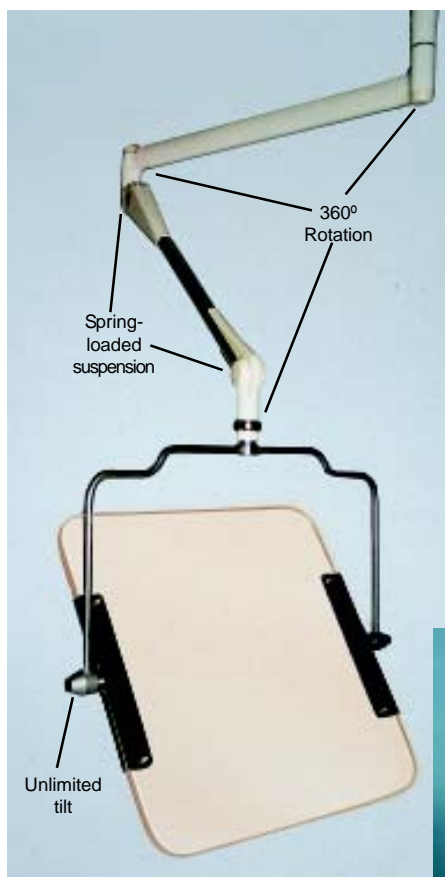


CLEAR-Pb® Shielding and Mobile Barriers

Models 56-7, 56-8, and 56-9 Series

- CLEAR-Pb lead-plastic x-ray shielding modular control booths, windows, and mobile and overhead barriers
- See also, Diagnostic Radiology Shielding Calculation Software Program (Model 56-695) to calculate shielding thicknesses



Who you rely on for Radiation Protection is as important as the product you choose

Your patients have chosen you as their healthcare provider based on your years of experience, expertise, and reputation. It stands to reason then, that you should demand the same qualities from your radiation protection product supplier...after all, your health depends on it.

We take radiation protection seriously

For more than three decades, medical imaging professionals have relied on our exceptional product quality and selection, clinical experience, technical expertise, and professional service. Our outstanding reputation is the result of our ongoing commitment to maintaining the high standards you expect.

When it comes to your health and safety, consider us your radiation protection specialist

Only the safest, most effective, and durable products are incorporated into our product line. You can count on us to understand your individual radiation protection requirements and stand behind every product we sell...before, during, and after the sale.



How to order and assemble CLEAR-Pb Lead-Plastic X-Ray Shielding Window Panes and Modular Control Booths

(A) CLEAR-Pb Lead-Plastic X-Ray Shielding Window Pane

(See next page for ordering information.)

(B) Opaque Shielding Panels The High-Style panels are available in 16 colors of vinyl laminate. The Classic panels have a durable, polyurethane beige paint finish. Both are lead-lined to provide 1.5 mm lead protection.

(C,D,E) Vertical Coupling Channels The High-Style channels are made of brushed anodized aluminum. The Classic channels are made of steel. Both are lined with lead, facing the x-ray source, (except 56-831 end-channels). Minimum 1.5 mm (0.06 inch) lead-equivalent.

(G) Horizontal Coupling Channels Provide shielding overlap as well as structural connection between the CLEAR-Pb window pane and the opaque panel.

(H) Floor Channels High-Style is designed as a kick-plate and is 5.50 inch high. The Classic is 0.75 inch high. Both are predrilled for bolting to floor.

(J) Tie-Rods (Not needed for High-Style Mobile Control Booths.) Any 84 inch vertical channel or end-channel can be anchored to a wall or ceiling by means of an adjustable, two-piece tie-rod. One end of the rod fastens to the top of the vertical-channel; the other end attaches to the wall-mounting bracket that has been affixed to the wall. Tie-rods can also be connected to ceiling beams.

(K) Tie-Channels A tie-channel prevents separation of the end-channel from its window pane. It must be installed between the tops of each vertical end-channel and the nearest vertical coupling channel.

(L) Wall-Mounting Brackets (Not needed for High-Style barriers.) A 34 inch long, 16-gauge steel bracket is mounted horizontally on the wall.

(N) Channel Spacers For use when CLEAR-Pb window panes of 22, 18, or 12 mm thickness are installed. The spacers are installed along the rear edge of the vertical and/or horizontal bracket to prevent movement of the window pane.

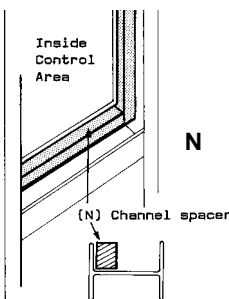
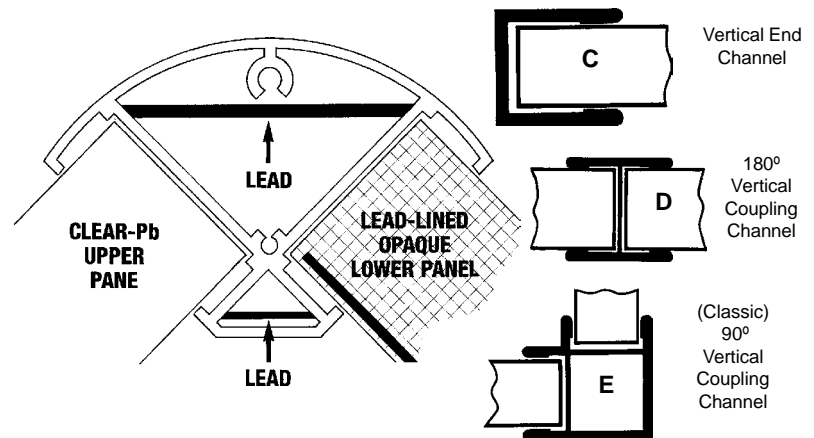


Figure 2



Detailed view of High-Style Vertical Coupling Channel

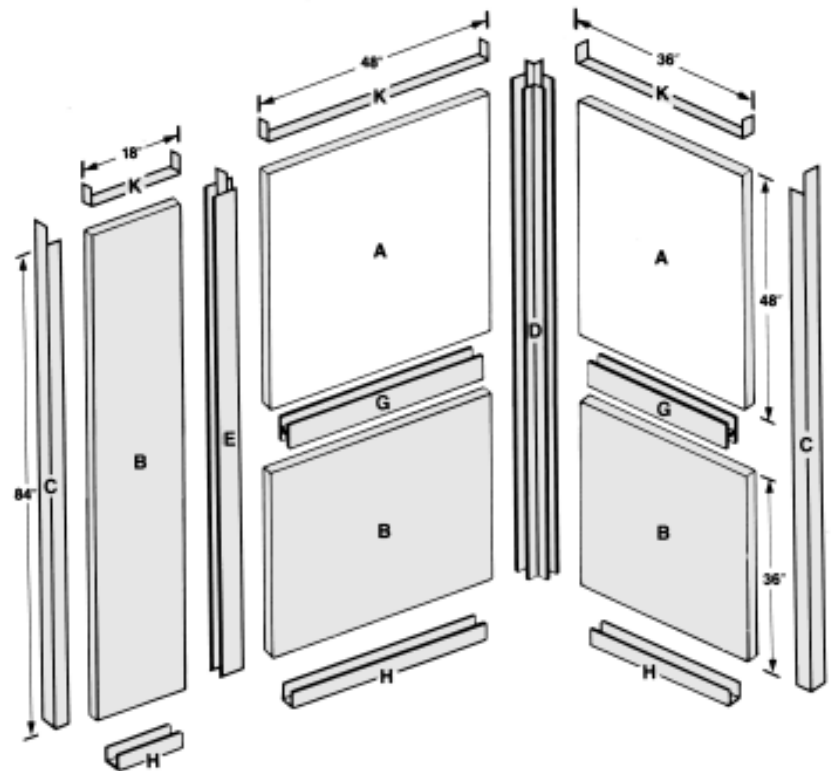


Figure 1. This exploded view from behind the barrier shows the components required to assemble an 18 (w) x 84 inch (h) High-Style or Classic Opaque Shielding Panel with a 48 inch wide CLEAR-Pb window pane, both at right angles to a 36 inch barrier section

NOTE: Figure 3 depicts a Classic Mobile Modular Barrier. The components required to assemble our High-Style barriers are similar, but fewer (see J and L)

CLEAR-Pb Lead-Plastic X-Ray Shielding Standard Window Panes (key letter “A”)

NOTE: Only the bolded models and sizes are available for use in High-Style and Classic Modular Control Booths.

Any size window pane can be used in a thru-wall installation. We offer a complete line of Lead-Lined Steel Window Frames for use in thru-wall applications. See below for details.

Window size (inches)	Lead equivalence 0.3 mm (thickness 8 mm) Model	Lead equivalence 0.5 mm (thickness 12 mm) Model	Lead equivalence 0.8 mm (thickness 18 mm) Model	Lead equivalence 1.0 mm (thickness 22 mm) Model	Lead equivalence 1.5 mm (thickness 35 mm) Model	Lead equivalence 2.0 mm (thickness 46 mm) Model
12 x 12		56-741	56-751	56-761	56-771	56-791
12 x 24		56-740	56-750	56-760	56-770	56-790
18 x 24		56-708	56-718	56-728	56-738	
18 x 48		56-702	56-712	56-722	56-732	
24 x 24	56-786	56-705	56-715	56-725	56-735	56-796
24 x 30		56-742*	56-752	56-762	56-772	
24 x 36		56-704	56-714**	56-724	56-734	
24 x 48	56-787	56-747	56-757	56-767	56-777	56-797
32 x 40		56-701	56-711	56-721	56-731	
36 x 48	56-788	56-703	56-713	56-723	56-733	56-798
36 x 60		56-706	56-716	56-726	56-736	
36 x 72		56-707	56-717	56-727	56-737	
36 x 84	56-780	56-709	56-719	56-729	56-739	56-799
48 x 48		56-746	56-756	56-766	56-776	56-792
48 x 60		56-745	56-755	56-765	56-775	
48 x 72	56-789	56-700	56-710	56-720	56-730	
48 x 84		56-744	56-754	56-764	56-774	
48 x 96		56-743	56-753	56-763	56-773	56-793
72 x 96		56-748	56-758	56-768	56-778	
Window panes larger than 72 x 96 inches and custom-cut sizes are available on special order. Call or write for a quotation.						
* Model 56-742 actual cut size is 24 x 29.9375 inch.						
** Model 56-741 actual cut size is 24 x 35.9375 inch.						
NOTE: 3.0 mm lead-equivalence is available on special order. Call for information.						

Additional window pane stock sizes

(Available in 1.5 mm lead equivalence)

Size (inches) /LE	Model	Size (inches) /LE	Model
10 x 12 x 1.5 mm LE	56-771-1012	18 x 36 x 1.5 mm LE	56-734-1836
12 x 16 x 1.5 mm LE	56-770-1216	16 x 24 x 1.5 mm LE	56-738-1624
12 x 18 x 1.5 mm LE	56-770-1218	30 x 36 x 1.5 mm LE	56-731-3036
12 x 36 x 1.5 mm LE	56-734-1236	36 x 36 x 1.5 mm LE	56-733-3636
18 x 18 x 1.5 mm LE	56-738-1818		

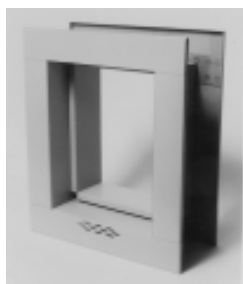
See also, Diagnostic Radiology Shielding Calculation Software Program (Model 56-695) to calculate shielding thicknesses.

Lead-Lined Steel Window Frames

For use with CLEAR-Pb Lead-Plastic X-Ray Shielding Window Panes

- 2-piece telescopic construction for easy, quick installation
- 1.5 mm lead-equivalent lining included
- Voice transmission feature permits communication between rooms
- Adjusts for walls of varying thickness
- Over 25 stock sizes available. Special sizes can be custom-ordered

Now you can get the beauty and protection of panoramic CLEAR-Pb Lead-Plastic Windows with the professional look of lead-lined steel frames. Designed to be installed in lead-lined walls between the operator and patient areas, our window frames allow for panoramic viewing and voice contact during radiographic procedures.



Made of 18-gauge steel and lined with 1.5 mm lead, they feature removable stops so they can be easily unassembled. The long dimension is horizontal (12 x 16 inch is the exception) and the voice transmission feature is centered on the horizontal. The frame can be used horizontally or vertically. Finished with an attractive, light grey baked enamel, the frame design allows for a greater range of vision, even when using smaller size windows.

Model	Frame sizes (inches)	Model	Frame sizes (inches)	Model	Frame sizes (inches)
56-811-1008	8 x 10	56-812	24 x 30	56-814-4084	40 x 84
56-811-1012	10 x 12	56-804	24 x 36	56-803-4832	48 x 32
56-811	12 x 12	56-817	24 x 48	56-816	48 x 48
56-810-1216	12 x 16	56-801	32 x 40	56-815	48 x 60
56-810	12 x 24	56-803-3636	36 x 36	56-800	48 x 72
56-808-1418	14 x 18	56-803	36 x 48	56-814	48 x 84
56-808-1624	16 x 24	56-806	36 x 60	56-813	48 x 96
56-808	18 x 24	56-807	36 x 72	56-818	72 x 96
56-802	18 x 48	56-809	36 x 84		
56-805	24 x 24	56-813-3696	36 x 96		

Classic Modular Barrier Lead-Lined Opaque Panels

(key letter "B")

Classic Modular Barriers have opaque panels that consist of a formaldehyde free plastic honeycomb, sandwiched between two vinyl laminates. One side of the panel is lead-lined to provide 1.5 mm lead x-ray protection. Classic panels have a durable polyurethane beige finish.

Modular Control Booth assembly hardware components

Key letter	Height (inches)	Angle	Component description	High-Style	Classic
(C)	84	—	Vertical End Channel	56-821	56-831
(C)	84	—	Vertical End Channel*	56-826	NA
(D)	84	30°	Vertical Channel	56-825	56-835
(D)	84	45°	Vertical Channel	56-820	56-830
(D)	84	60°	Vertical Channel	56-823	56-833
(D)	84	90°	Vertical Channel	56-824	56-834
(E)	84	180°	Vertical Channel	56-822	56-832
(J)	—	—	Adjustable 2 piece Tie-Rod, 4-6 ft	NA	56-841
(J)	—	—	Adjustable 2 piece Tie-Rod, 6-10 ft	NA	56-849
(L)	—	—	Wall-Mounting Bracket (34 inch)	NA	56-851

* Mounts to wall.

Classic Opaque Panels	
H x W (inches)	Model
36 x 96	56-983
36 x 84	56-973
36 x 72	56-963
36 x 60	56-953
36 x 48	56-943
36 x 36	56-933
36 x 24	56-923
36 x 18	56-903
84 x 18	56-970

Viewing Pane width (inches)	Key letter "G"		Key letter "H"		Key letter "K"	
	High-Style Horizontal Coupling Channels	Classic Horizontal Coupling Channels	High-Style 5.50 inch high Kick-Plate Floor Channels	Classic Floor Channels	High-Style (top) Tie-Channels	Classic (top) Tie-Channels
96	56-878	56-848	56-888	56-858	56-898	56-868
84	56-877	56-847	56-887	56-857	56-897	56-867
72	56-876	56-846	56-886	56-856	56-896	56-866
60	56-875	56-845	56-885	56-855	56-895	56-865
48	56-874	56-844	56-884	56-854	56-894	56-864
36	56-873	56-843	56-883	56-853	56-893	56-863
24	56-872	56-842	56-882	56-852	56-892	56-862
18	56-870	56-840	56-880	56-850	56-890	56-860

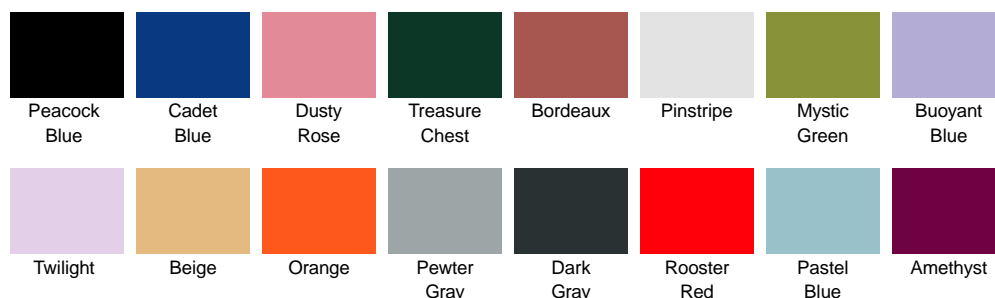
High-Style Modular Barrier Lead-Lined Opaque Panels

(key letter "B")

Modular Barriers have opaque panels that consist of a formaldehyde free plastic honeycomb, sandwiched between two vinyl laminates. The panel is lead-lined to provide 1.5 mm lead x-ray protection.

High-Style panels are available in 16 decorator colors, making for a visually appealing installation. (Please mention color selection when ordering.)

Classic panels have a durable polyurethane painted beige finish. (See above for model numbers.)



Choose from these 16 decorator colors

(Please mention color selection when ordering)

NOTE: Every effort has been made to ensure accurate color representation. A color swatch is available upon request.

High-Style Opaque Panels	
H x W (inches)	Model
36 x 96	56-983-8000
36 x 84	56-973-8000
36 x 72	56-963-8000
36 x 60	56-953-8000
36 x 48	56-943-8000
36 x 36	56-933-8000
36 x 24	56-923-8000
36 x 18	56-903-8000
84 x 18	56-970-8000

CLEAR-Pb Lead-Plastic Mobile X-Ray Barriers



Regular Barrier 56-603. This rugged mobile barrier can easily fit into the most confining of spaces and provides exceptional visibility



Deluxe Barrier 56-616, 56-617. The large 48 inch wide, shatter-resistant CLEAR-Pb Lead-Plastic window provides unrestricted visibility and maximum protection for two or more people

Available in 16 Decorator Colors!

Mobile Barriers are typically supplied with beige opaque panels and hardware. Now they are also available in a choice of 16 decorator colors (see previous page) for an additional charge. When ordering, include model number of barrier from specification matrix (on the next page) and model number 56-601-1212 *plus your color selection* from previous page. Please allow six to eight weeks for delivery.



Nuclear Medicine Barrier 56-602. Specifically designed shorter and wider for shielding nuclear medicine personnel from patient-emitted radiation

CLEAR-Pb Lead-Plastic Mobile X-Ray Barriers *(continued)*



Ultra Barrier 56-618, 56-619. Provides full-body protection to groups of medical personnel assisting in or observing a procedure



Jumbo Barrier 56-604. Large 60 x 30 inch shatter-resistant CLEAR-Pb Lead-Plastic window provides superb full-height visibility

CLEAR-Pb Lead-Plastic Mobile Barrier specifications

	Regular	Nuclear Medicine	Deluxe		Ultra		Jumbo
	56-603	56-602	56-616	56-617	56-618	56-619	56-604
Overall size	75 (h) x 30 in (w)	61 (h) x 36 in (w)	75 (h) x 48 in (w)	75 (h) x 48 in (w)	75 (h) x 72 in (w)	75 (h) x 72 in (w)	75 (h) x 30 in (w)
Window pane lead equivalent	24 (h) x 30 in (w) 0.5 mm	24 (h) x 36 in (w) 0.8 mm	36 (h) x 48 in (w) 0.5 mm	36 (h) x 48 in (w) 1.0 mm	36 (h) x 72 in (w) 0.5 mm	36 (h) x 72 in (w) 1.0 mm	60 (h) x 30 in (w) 0.5 mm
Opaque panel lead equivalent	48 (h) x 30 in (w) min. 0.03 in (0.8 mm)	34 (h) x 36 in (w) 0.06 in (1.5 mm)	36 (h) x 48 in (w) min. 0.03 in (0.8 mm)	36 (h) x 48 in (w) 0.06 in (1.5 mm)	36 (h) x 72 in (w) min. 0.03 in (0.8 mm)	36 (h) x 72 in (w) 0.06 in (1.5 mm)	12 (h) x 30 in (w) —
Shipping weight*	110 lb	170 lb	230 lb	312 lb	334 lb	409 lb	113 lb

* Approximate.

CLEAR-Pb Lead-Plastic Overhead X-Ray Barriers

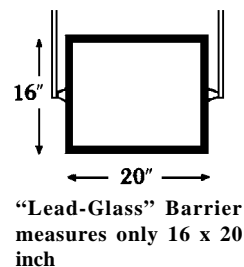
Designed for cardiac catheterization and special procedures



The problem

Until now, protection of cath lab/special procedures personnel from radiation exposure has been less than ideal.

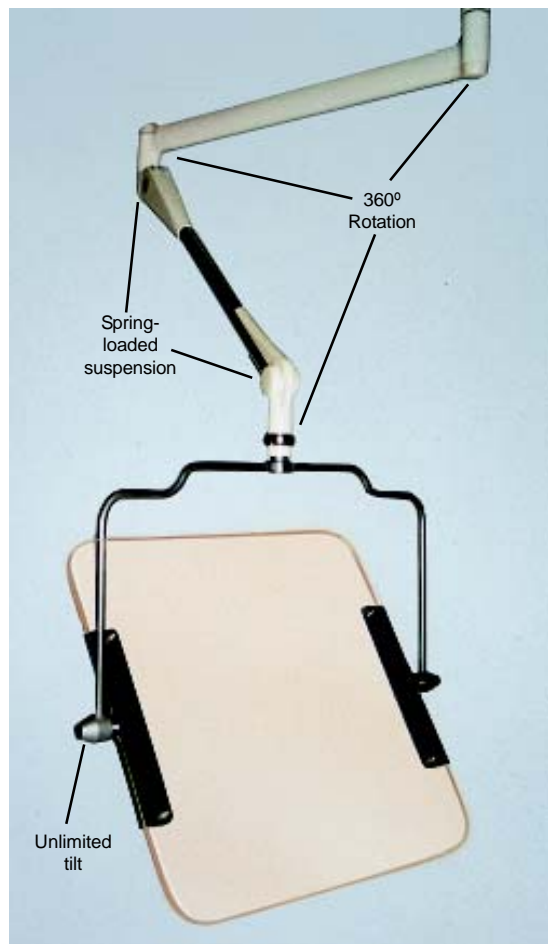
Existing lead-glass overhead barriers are usually much too small and inconvenient to use. Lead-glass barriers are so small (usually 16 x 12 inch or 20 x 16 inch) that when you move, you must also move the barrier to avoid exposure. They barely provide room to protect one person. And, in many cases, visibility is limited by the protective frame around the lead-glass shield.



The solution

CLEAR-Pb Lead-Plastic Overhead X-Ray Barriers

- Bigger shielding area and panoramic visibility: No need to reposition the barrier during the procedure; protects two people, if required. All CLEAR-Pb Window Panels supplied with the Overhead X-Ray Barriers have smooth, rounded corners
- Unsurpassed radiation protection: shatter-resistant, CLEAR-Pb lead-plastic (0.5 mm lead equivalent)
- State-of-the-art design provides reliable, safe performance
- Freedom of movement: easy-to-use, easy-to-adjust ceiling-suspended CLEAR-Pb Overhead Barriers give you fingertip, hands-on control -- a necessity during procedures
- Choice of four panoramic shield sizes (see next page)



Unlimited tilt and rotation. Unique design enables you to instantaneously tilt the shield at any convenient position

The CLEAR-Pb suspension system allows full 360° rotational movement of the barrier



Easy up, easy down. CLEAR-Pb Lead-Plastic Overhead Barriers have been designed to enable you to effortlessly position the barrier instantaneously during the procedure. The CLEAR-Pb spring-loaded suspension system allows smooth, quick, precise barrier positioning. Just pull it down to use and push it up and out of the way when the procedure is completed

See also, RadiaXon™ Radiation Attenuation Gloves (Model 57-965) used in interventional procedures.

CLEAR-Pb Lead-Plastic Overhead X-Ray Barriers *(continued)*

Fixed-Mount or optional Easy-Glide Track System

- CLEAR-Pb Lead-Plastic Overhead Barriers are available in your choice of a fixed ceiling-mounted or optional Easy-Glide Track System
- Both systems feature spring loaded suspension—just pull it down to use. Push it up and out of the way when the procedure is completed
- The generous size and panoramic visibility reduce the need to reposition the barrier during the procedure. (Remember, other barriers are so small that when you move, you must also move the barrier to avoid exposure)
- Larger shielding area allows greater mobility and freedom of positioning behind the barrier. Our barriers can protect two people, if required
- The comparison is easy and you come out the winner when you select any one of our four CLEAR-Pb Lead-Plastic Overhead X-Ray Barriers. For radiation protection with unrestricted visibility and maneuverability, our barriers can't be beat
- Flexible Lead Shielding Drape (optional): For added radiation protection, you can order the optional lead-vinyl shielding drape. It can be easily attached with Velcro® to the lower portion of any CLEAR-Pb Overhead Barrier. The lead-vinyl drape (0.5 mm lead-equivalent) comes in an attractive beige-tone color

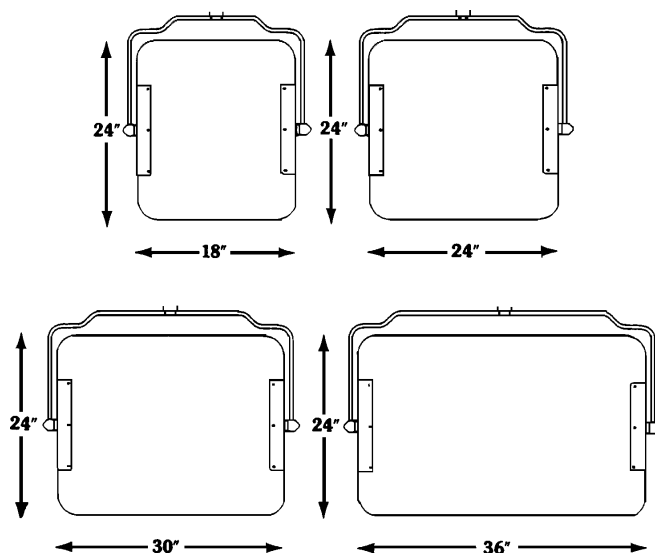
Optional Easy-Glide Track System



The linear motion Easy-Glide Track System can be ordered for use with all CLEAR-Pb Lead-Plastic Overhead X-Ray Barriers. Its ultra-slim design takes up very little ceiling space (when compared to conventional ceiling track systems), making it perfect for tight-fit situations. The linear motion Easy-Glide Track System enables you to move your CLEAR-Pb Overhead Barrier into or out of position in seconds. It is quick and easy to install. The Easy-Glide Track System is supplied with 99 inches of straight track.

CLEAR-Pb Lead-Plastic Overhead X-Ray Barriers

Choice of four panoramic shield sizes



Specifications

CLEAR-Pb Shielding Panel: shatter-resistant, distortion-free lead-plastic. Optically clear with a light amber tint. Provides 0.5 mm lead-equivalent protection

Optional accessories

Easy-Glide Track System (Model 56-628-8000)

Lead Drape, 18 in (w) (Model 56-628-7018)

Lead Drape, 24 in (w) (Model 56-628-7024)

Lead Drape, 30 in (w) (Model 56-628-7030)

Lead Drape, 36 in (w) (Model 56-628-7036)

Disposable Sterile Drape. Fits 36 x 24 in shield only (Model 56-628-7000)

Available model(s)

56-628-1824 CLEAR-Pb Overhead Barrier, 18 (w) x 24 in (h)

56-628-2424 CLEAR-Pb Overhead Barrier, 24 (w) x 24 in (h)

56-628-3024 CLEAR-Pb Overhead Barrier, 30 (w) x 24 in (h)

56-628-3624 CLEAR-Pb Overhead Barrier, 36 (w) x 24 in (h)

CLEAR-Pb Lead-Plastic Special Procedures/ Anesthesiology/O.R. Personal X-Ray Protection Mobile Barriers

- Provides upper-body shielding and crystal-clear visibility during cardiac catheterization and special procedures
- Shatter-resistant lead-plastic window is easily positioned over table
- Compatible with rotary patient cradles
- Adaptable to sterile fields

Specifications

CLEAR-Pb viewing window Made of shatter-resistant, distortion-free lead-plastic, 24 in x 36 in x 12 mm thick (0.5 mm lead-equivalent). Optically clear with light amber tint. Bottom edge of shield can be adjusted from 36 to 54 inches above the floor

Floor stand Lightweight aluminum, 76 inches high, mounted on a 21 x 20 inch base with five casters. Counterbalanced vertical adjustment of x-ray shielding window pane. Knob-lock holds window securely at any level

Available model(s)

56-615 CLEAR-Pb Adjustable-Height Mobile X-Ray Barrier with special window pane design for rotary patient cradles. Net weight is 61 lb (28 kg)

56-614 CLEAR-Pb Adjustable-Height Mobile X-Ray Barrier with 36 x 24 inch shield. Net weight is 63 lb (29 kg)



Adjustable-Height Mobile Barrier shields the user's upper body while providing a clear view of the patient and equipment. Note how close to the patient the physician can get and still be protected. The Model 56-615 barrier can be used with rotary patient cradles. The specially-shaped window permits unobstructed rotation of the cradle during examinations



Shield provides superior protection from scatter radiation, yet is compact enough to allow the anesthesiologist to work around it when necessary

- The CLEAR-Pb lead-plastic personal radiation protection mobile barrier is the perfect way to protect anesthesia and other surgical personnel

Specifications

Overall size of barrier

69 (h) x 24 in (w)

Window pane size

48 in (h) x 24 in (w)

Lead-equivalence 0.5 mm

Shipping weight 51 lb (23 kg)

Available model(s)

56-612 CLEAR-Pb Lead-Plastic Anesthesiology/O.R. Personal X-Ray Protection Mobile Barrier



A uniquely designed handle enables you to quickly & easily move the CLEAR-Pb Personal X-Ray Protection Mobile Barrier into or out of position, while standing or sitting



The shield is set in a heavy-duty five-caster base to ensure stability and ease of movement

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

Specifications are subject to change without notice. CLEAR-Pb is a registered trademark of Cardinal Health, Inc. or one of its subsidiaries. Velcro is a registered trademark of Velcro Industries B.V.

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Stainless Steel Mobile Barriers

Model 56-663 and 56-664



Radiation Safety



- **Attractive stainless steel hardware**
- **Provide full body shielding**
- **Eye-catching and durable**
- **Easy to handle with sturdy casters**

Introduction

The Regular and the Jumbo Mobile Barriers can safely shield one or two persons. The updated **stainless steel** hardware provides the “look” to your discriminating healthcare designers and their healthcare purchasing staff. These best-selling models are available in 0.5 mm lead equivalence.

Applications

Ideal for use in Operating Rooms, Special Procedure Suites and Cardiac Cath Labs. The Stainless Steel Hardware Mobile Barriers are the perfect fit in any imaging room due to their 30 inch width and easy maneuverability.

Specifications

Regular mobile barrier (Model 56-663)

Overall size 75 (h) x 30 in (w)

Window pane size 24 (h) x 30 in (w)

Lead equivalent 0.5 mm

Opaque panel size 48 (h) x 30 in (w)

Lead equivalent 0.8 mm

Shipping weight 110 lb

Jumbo mobile barrier (Model 56-664)

Overall size 75 (h) x 30 in (w)

Window pane size 60 (h) x 30 in (w)

Lead equivalent 0.5 mm

Opaque panel size 12 (h) x 30 in (w)

Lead equivalent not applicable

Shipping weight 113 lb

Features

- CLEAR-Pb® Windows 0.5 mm LE
- Exceptional visibility
- Easy to assemble
- Total size 30 inch (w) x 75 inch (h)

For additional information, please contact the Radiation Management Services business of Cardinal Health at 440.248.9300, fax 440.349.2307 or e-mail rmsinfo@cardinal.com; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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ssmb-ds rev 2 09 aug 04



www.cardinal.com/rms

RadiaXon™

Radiation Attenuation Gloves

Models 57-965-1000 to 57-990-2000

Examples of fluoroscopic application where the RadiaXon can partner with your surgical gloves

- Percutaneous trans-luminal angioplasty (coronary and other vessels)
- Radio-frequency cardiac catheter ablation; vascular embolization
- Stent and filter placement
- Thrombolytic and fibrinolytic procedures; percutaneous transhepatic cholangiography
- Endoscopic retrograde cholangiopancreatography; transjugular intrahepatic portosystemic shunt; percutaneous nephrostomy
- Biliary drainage
- Urinary/Biliary stone removal
- Beta radiation catheterization (⁹⁰Y source); percutaneous trans-myocardial re-vascularization
- Percutaneous coronary interventions; radioactive seed implants
- Trans-myocardial re-vascularization
- Treatments of gynecologic and reproductive disorders; neuroradiology
- Embolectomy and thrombectomy; vascular embolization & occlusion



- Treatments of abdominal aortic aneurysms
- Rotational atherectomy; orthopedics
- Chemotherapy labs



Radiation Safety

Main applications

- Diagnostic heart catheterization
- Coronary angioplasty
- Angiocardiography
- Gynecology
- Urology
- Pain management
- Orthopedic

Specifications

Size 6.5 to 9.0

Weight Minimum 22 g/glove

Thickness at fingertips Minimum 0.20 mm

Length Minimum 290 mm

Tensile strength (MPa) Minimum 14 (unaged)

Radiation attenuation data*

Attenuation measurements acc. to DIN 6845-1 / IEC 1331-1 and acc. to ICRP 60 / ICRU 51. Personal skin dose reduction $H_p = 0.07$ mm, at nominal glove thickness of 0.30 mm. See below

Settings lead equivalence 80 kVp, 2.5 mm Al / 0.15 mm Cu filters, NARROW BEAM

Measured value 0.03 to 0.04 mm Pb

Product conformance In compliance with EN 420, EN 374-2, EN 388, and DIN 6845-1 / IEC 1331-1

Quality assurance Manufacturing process is in compliance with US FDA Quality System Regulation (QSR) and BS EN ISO 9001 Quality System. RadiaXon is certified by OSHA, Germany



Available model(s) and packaging

Parameter	Measured value	Skin dose reduction in %		
		Single wall fingertip	2-D 2 cm finger 90% incidence	3-D 2 cm finger 30% incidence
Settings†	Direct radiation	60 kVp	46%	54%
60, 80, 100 kVp	5 cm from water phantom	80 kVp	37%	43%
2.5 mm Al / 0.15 mm Cu filters, BROAD BEAM water-phantom	Scattered radiation	100 kVp	30%	38%
acc. to DIN 6815, Hp = 0.07 mm acc. to ICRP 60 / ICRU 51	15 cm from water phantom	60 kVp	59%	67%
		80 kVp	49%	56%
		100 kVp	42%	48%

† Dose reduction > 50% equals FACTOR 2.

* Values may vary within permissible product specifications, depending on glove-size, mean-average thickness, glove weight, and length and accuracy of measurement (measuring arrangement of equipment according to ICRP 60 and ICRU 51).

Tested by OSHA, Germany LFAS

Caution
This glove is intended for procedural examination purposes. It is NOT intended for use in direct or primary x-ray beam or any transmitted x-ray beam. The purpose of this radiation protective glove is to protect the hands from scattered secondary radiation exposure originated from x-ray beam during fluoroscopic examination procedures. To be used in conjunction with sterile surgical gloves. For single use only. Repeated use may reduce attenuation, barrier effectiveness, and efficacy of glove.

Caution
This product contains natural rubber latex that may cause allergic reactions. Safe use of this product by, on, or around latex sensitive individuals has not been established. Components used in making this product may cause allergic reactions. If a reaction occurs or is suspected, immediately discontinue use of this product and consult a physician.

RadiaXon Radiation Attenuation Gloves		
Size	Mini-case 20 pair	Case 60 pair
6.5	57-965-1000	57-965-2000
7.0	57-970-1000	57-970-2000
7.5	57-975-1000	57-975-2000
8.0	57-980-1000	57-980-2000
8.5	57-985-1000	57-985-2000
9.0	57-990-1000	57-990-2000



For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

Specifications are subject to change without notice.

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57-965-ds rev 1 12 mar 03

Rad-Guard Radiation Protection Hand Shields*

Model 57-990

- Comfortable, effective protection for radiologists
- Will not compromise fine motor control
- 0.5 mm lead equivalency
- Lightweight, durable
- Designed to be worn under sterile surgical gloves

Specifications

Lead-equivalence 0.5 mm

Dimensions

Large 4.25 (w) x 5.5 in (l)

Small 3 (w) x 3.25 in (l)

Weight

Large 0.44 lb (0.2 kg)

Small 0.3 lb (0.14 kg)

Available model(s)

57-990 Rad-Guard Radiation Protection Hand Shields, Large pair

57-991 Rad-Guard Radiation Protection Hand Shields, Small pair

With Rad-Guard Radiation Protection Hand Shields, you can effectively minimize radiation exposure to your hands, thereby protecting yourself from the long-term effects of chronic radiation exposure. They fully eliminate the use of bulky, expensive, ineffective leaded gloves.

Lead-lined gloves offer limited protection. . .

A study published in the journal *Radiology*, published by the Radiological Society of North America, reported that leaded gloves "are relatively expensive, given their short life span. In

addition, leaded gloves provide limited attenuation of x-rays, may decrease tactile sensation and fine motor control in the fingers, and may lead the wearer to place his or her hands in the beam more often, due to an increased sense of security."¹ In a separate study also published in the journal *Radiology*, the authors found that "attenuating gloves provide a moderate to insubstantial reduction in dose to the hand, depending on the beam energy, direction of the beam, and type of glove. Additionally, the amount of protection may be perceptually exaggerated when viewed with a fluoroscope. The fluoroscope displays the hand inside two layers of attenuating glove, but the dose to the hand results after penetrating through only one layer, and the second layer detracts from protection by scattering x-rays back into the hand."²

Rad-Guard is the best protection. . .

Rad-Guard is secured to the palm of the hand with nonbinding Velcro straps, and can comfortably be worn under sterile surgical gloves. Soft fabric lines the palm-side, and durable vinyl lines the outer side. Rad-Guard contains a lead insert (0.5 mm lead equivalency) that can be easily removed through a Velcro closure, prior to laundering of the hand shields. *Rad-Guard is low-cost and cost-effective, and can be used again and again!*



Rad-Guard Radiation Protection Hand Shields are secured to the hand by adjustable Velcro® straps

References

1. M. Victoria Marx, M.D., and James H. Ellis, M.D., "Radiation Protection of the Hand in Interventional Radiology: Should it Fit Like a Glove?," *Radiology*, 200 (July 1996), 24-25.
2. Louis K. Wager, Ph.D. and Oscar R. Mulhern, B.S., "Radiation-attenuating Surgical Gloves: Effects of Scatter and Secondary Electron Production," *Radiology*, 200 (July 1996), 45-48.

Doses and percent penetration @ 80 kVp

At surface of Rad-Guard	Under Rad-Guard	Percent penetration
224 ± 26 mrem	83.5 ± 0.7 mrem	37%

Exposures were recorded by calibrated TLD chips on top and under a Rad-Guard Hand Shield worn on the hand during a clinical fluoroscopic examination (Neal Rosner, M.D., Martin Rozenfeld, Ph.D., 1996, personal communication)

US Patent No. 5,638,545.

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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57-990-ds rev 1 12 mar 03

* Developed by Neal H. Rosner, M.D., Medical Director, Department of Radiology, St. James Hospital and Health Centers, Chicago Heights, IL.

GLASSERS™ Radiation Protection Eyewear

Models 56-501 to 56-545



Radiation Safety



GLASSERS with Side-Shields and Thyro-Shield™



GLASSERS with Side-Shields



Wrap-Arounds



GLASSERS without Side-Shields

- Reduce scatter radiation to the eye lens by up to 90%
- 0.5 mm lead-equivalent shielding
- Meets ANSI Z80.1-1995 standards
- Meets MIL-1-45208A standards
- Meets or exceed standards for optical clarity
- Choose from four designer frame colors: silver grey, black, red, or blue. Wrap-Arounds are available in dark amber only

Introduction

GLASSERS are optically clear and provide unimpaired peripheral vision. The extra-large lens area protects better because it reduces scatter radiation striking the eye-socket bone structure. GLASSERS lenses provide 0.50 mm lead-equivalent protection. For added comfort, GLASSERS have plastic-reinforced ear rests, and like regular eyeglasses, GLASSERS feature adjustable nose-bridge pads.

For proven protection you can rely on, nothing beats GLASSERS.

GLASSERS with Side-Shields

Certain procedures require the fluoroscopist to rotate their head up to 90 degrees, thus exposing their eyes to scatter radiation from the side. For these procedures, the optional CLEAR-Pb® Lead-Plastic Side-Shields offer added protection, without restricting peripheral vision. Side-Shields may be ordered separately and are easily attached to GLASSERS. Side-Shields come with a lifetime warranty.

GLASSERS Wrap-Arounds

These radiation protection eyeglasses feature a comfortable dark amber plastic frame. The specially-designed continuous frame incorporates side panels, of 0.50 mm lead-equivalent shielding. This design ensures that peripheral vision is never compromised.

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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Model	Color	Description
56-505	silver grey	GLASSERS, plain lenses, <u>no</u> Side-Shields
56-525	black	
56-535	red	
56-545	blue	
56-504	silver grey	GLASSERS, plain lenses <u>with</u> Side-Shields
56-524	black	
56-534	red	
56-544	blue	
56-506	silver grey	GLASSERS, prescription lenses, <u>no</u> Side-Shields
56-506-31	black	
56-506-32	red	
56-506-33	blue	
56-501	silver grey	GLASSERS, prescription lenses <u>with</u> Side-Shields
56-501-31	black	
56-501-32	red	
56-501-33	blue	
56-510	silver grey	GLASSERS, bifocal prescription lenses, <u>no</u> Side-Shields
56-510-31	black	
56-510-32	red	
56-510-33	blue	
56-511	silver grey	GLASSERS, bifocal prescription lenses <u>with</u> Side-Shields
56-511-31	black	
56-511-32	red	
56-511-33	blue	
56-520	silver grey	GLASSERS, trifocal prescription lenses, <u>no</u> Side-Shields
56-520-31	black	
56-520-32	red	
56-520-33	blue	
56-521	silver grey	GLASSERS, trifocal prescription lenses <u>with</u> Side-Shields
56-521-31	black	
56-521-32	red	
56-521-33	blue	
56-514	dark amber	Wrap-Arounds, plain lenses, plastic frames
56-512	dark amber	Wrap-Arounds, prescription lenses, plastic frames
56-513	dark amber	Wrap-Arounds, bifocal prescription lenses, plastic frames
56-508	—	Side Shields only, set of 2, made out of CLEAR-Pb Lead-Plastic
57-753	beige only	Thyro-Shield

Urological Radiation Shield†‡

Model 56-675

- Clinically proven to reduce radiation exposure to the surgeon by up to 98% at six inches from the perineum¹
- Significantly reduces scatter radiation exposure to the operating surgeon and staff during endourologic procedures
- Compatible with all types of endourologic tables
- Easy-to-use
- Convenient to install
- Allows full, easy access to the patient
- Cost-effective
- Optimized for procedures such as cystoscopy and ureteroscopy, in which fluoroscopy or x-ray will be used



Features

- Everything about the setup and use of this innovative protective shield is simple and efficient
- The unique design of the Urological Radiation Shield* allows all surgical instruments to safely remain in place if the shield must be installed or removed during the procedure

The National Council on Radiation Protection recommends a maximal permissible whole-body dose for occupational exposure of 5 rem per year. Published studies indicate that at a position of six inches from the patient's perineum, the urologist may be exposed to up to 1.1 rem per hour. The greatest risk of radiation exposure is to the doctor's eyes, thyroid and upper extremities. Urological Radiation Shield has been proven to reduce this exposure.

† US Patent No. 5,417,225.

‡ The Urological Radiation Shield should be used in conjunction with conventional shielding, such as a lead apron, thyroid shield, and lead-lined glasses.

* Developed by Dr. John J. Pahira and the Departments of Surgery (Urology) and Radiation Safety, Georgetown University Medical Center, Washington, D.C.

Specifications

Sterilization The shield and aperture panels must be gas-sterilized between each case. It is therefore recommended that several shields be kept in the department

Shield

Material Vinyl-coated lead

Thickness 2 mm

Lead-equivalence 0.5 mm

Dimensions 27 in (w) x 34.25 (l)
(68.58 x 87 cm)

Weight 12.20 lb (5.54 kg)

Free clinical study reprint available

1. James G. Giblin, Jon Rubenstein, Alan Taylor, and John Pahira, "Radiation Risk to the Urologist During Endourologic Procedures, and a New Shield That Reduces Exposure," *Urology*, 48:4 (1996), 624-627. Request Reprint No. 591B.

Aperture panels

Dimensions 5.25 (w) x 9 in (l)
(13.34 x 22.86 cm)

Weight 1.3 lb (0.58 kg)

Support rail components

Vertical box bar 34 in (h)

Horizontal box bar 18 in (l)

Horizontal round bar 32 in

Weight 10.5 lb (4.7 kg)

Optional accessories

Support Rails (Model 56-675-1000)

Urological Radiation Shield
(Model 56-675-2000)

Available model(s)

56-675 Urological Radiation Shield, includes support rails

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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56-675-ds rev 1 12 mar 03

Moti X-Ray Mask

Model 56-515



Introduction

Because fluoroscopy and special procedures examinations require personnel to be present at tableside for prolonged periods of time, they result in the highest exposure to diagnostic x-ray personnel. Wearing the Moti X-Ray Mask during in-room procedures will reduce exposure to the head and neck by up to 96.6%, without reducing visibility or restricting movement. Eyeglasses can be worn underneath the mask, without any interference.

The lightweight Moti X-Ray Mask consists of a curved, CLEAR-Pb® Lead-Plastic window mounted in a rugged plastic frame, for superb protection and visibility.

Applications

The mask is held in place by attaching its soft, Velcro®-surfaced base to mating Velcro applied to the shoulders of a lead apron. In our Model 56-516 Moti X-Ray Mask/Apron combination, the Velcro has been pre-sewn to the apron's shoulder supports. Our Model 56-515 Moti X-Ray Mask (without apron) includes a kit for affixing the mating Velcro to your own lead apron.

When combined with a lead-apron, this protective setup provides full-body coverage from scatter radiation. The mask is secured to the lead-apron with Velcro.

KV setting	No filtration		Lead apron (0.50 mm)		Moti X-Ray Mask	
	mR	% abs.	mR	% abs.	mR	% abs.
60	170	0	1.64	99.0	5.86	96.6
80	319	0	6.70	97.9	24.4	92.4
100	495	0	20.6	95.8	54.9	88.9
126	800	0	44.7	94.4	113	85.9
150	970	0	70.5	92.7	176	81.9

RS

Radiation Safety

- Protects eyes, thyroid, and neck from radiation
- Allows complete freedom of movement, especially during special procedures
- Lightweight; only 2 pounds
- Ideal for fluoroscopy and special procedures
- It's the only full-face mask



Moti Mask is secured to apron with Velcro closure

Specifications

Weight

Mask 2 lb (0.91 kg)

Mask/apron set 14 lb (6.36 kg)

Available model(s)

56-515 Moti X-Ray Mask, with Velcro attachment kit

56-516 Moti X-Ray Mask, with lead apron (0.50 mm lead-equivalence)

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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56-515-ds rev 1 12 mar 03

Fixed-Height Rolling Radiation Shield

Model 67-741



- Extra-large 24 inch high x 36 inch wide shield
- Provides radiation protection at bedside, in the operating room and the recovery room

This rugged radiation shield features a 1 inch thick lead screen that reduces the dose from a cesium source by more than 90%. Four 5 inch diameter swivel casters provide maximum mobility. Wheel and swivel locks on each caster secure the shield in place.

Specifications

Shield dimensions 36 (w) x 24 (h) x 1 in (t) lead (91.44 x 61 x 2.54 cm)

Dimensions 25 (w) x 46.5 x 48 in (h) (63.5 x 118.11 x 121.92 cm)

Finish Durable polyurethane paint

Weight 350 lb (159.1 kg)

Available model(s)

67-741 Fixed-Height Rolling Radiation Shield



Adjustable-Height Rolling Radiation Shield

Model 67-747

- Easy-lift lead screen is raised using the foot-operated hydraulic jack
- Large 14 inch high x 36 inch wide shield
- Provides radiation protection at bedside, in the operating room and the recovery room

This convenient shield features an easy-to-adjust 1 inch thick lead screen that reduces the dose from a cesium source by more than 90%. The screen is set in a metal frame that is raised and lowered using a foot-pedal connected to a hydraulic jack. Four 5 inch diameter swivel casters provide maximum mobility. Wheel and swivel locks on each caster secure the shield in place.

Specifications

Finish Durable polyurethane paint

Shield dimensions 36 (w) x 14 (h) x 1 in (t) lead (91.44 x 35.56 x 2.54 cm)

Shield height Adjustable from 36 to 42.50 above floor level

Dimensions 25 (w) x 46.5 (d) x 42.5 in (h) (63.5 x 118.11 x 107.95 cm)

Weight 250 lb (113.64 kg)

Available model(s)

67-747 Adjustable-Height Rolling Radiation Shield

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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67-741-ds rev 1 12 mar 03

Lead Aprons

Models 57-940, 57-941, and 57-959

Available are three highly popular lead apron styles to meet your shielding and budget needs: the Thyro-Shield Lead Apron, the Tie-Closure Lead Apron, and the Belt-and-Buckle Lead Apron. All three styles feature shoulder and back supports for added comfort. They are fabricated from high-quality flexible materials that allow them to drape easily, so they don't restrict body movement. All aprons are available in dark blue, light blue, and beige.



Radiation Safety

- Comfortable, effective protection for personnel working in high radiation areas
- Maximum radiation protection in one convenient apron
- Nonrestrictive design
- Nonabsorbent and easy to clean
- Resists chemicals, abrasion, and aging
- Three styles and colors to choose from

Thyro-Shield™ Lead Apron

Tie-Closure Lead Apron

Model	Lead equiv.	Width (inches)	Length* (inches)	Weight
57-959-3218	0.5 mm	18	32	10.5 lb (4.8 kg)
57-959-3200	0.5 mm	24	32	11.5 lb (5.2 kg)
57-959-3400	0.5 mm	24	34	11.7 lb (5.4 kg)
57-959-3600	0.5 mm	24	36	12.5 lb (5.7 kg)
57-959	0.5 mm	24	38	13.5 lb (6.2 kg)
Model numbers shown are for dark blue only. To order light blue or beige, request model number.				
* Length is from neckline to bottom of apron.				

Model	Lead equiv.	Width (inches)	Length* (inches)	Weight
57-941-3218	0.5 mm	18	32	9.7 lb (4.4 kg)
57-941-3200	0.5 mm	24	32	10.2 lb (4.6 kg)
57-941-3400	0.5 mm	24	34	10.4 lb (4.7 kg)
57-941-3600	0.5 mm	24	36	11.1 lb (5 kg)
57-941	0.5 mm	24	38	12.2 lb (5.4 kg)
Model numbers shown are for dark blue only. To order light blue or beige, request model number.				
* Length is from neckline to bottom of apron.				

Belt-and-Buckle Lead Apron

Model	Lead equiv.	Width (inches)	Length* (inches)	Weight
57-940-3218	0.5 mm	18	32	9.7 lb (4.4 kg)
57-940-3200	0.5 mm	24	32	10.2 lb (4.6 kg)
57-940-3400	0.5 mm	24	34	10.4 lb (4.7 kg)
57-940-3600	0.5 mm	24	36	11.1 lb (5 kg)
57-940	0.5 mm	24	38	12.2 lb (5.4 kg)
Model numbers shown are for dark blue only. To order light blue or beige, request model number.				
* Length is from neckline to bottom of apron.				



Thyro-Shield™ Model 57-753

Reduce radiation exposure to the thyroid

- Lightweight, comfortable, easy to use
- Shields the thyroid area with 0.5 mm lead-equivalent protection

Dimensions 23 in (l), 2 to 4.75 in (w)

Weight 0.43 lb (0.2 kg)



For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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57-940-ds rev 1 12 mar 03

Lead-Lined Vinyl Curtains

Model 57-905

- Designed to meet all of your temporary and permanent radiation shielding needs
- Versatile
- Custom sizes available up to 24 inches wide x 50 inches long
- Can be easily moved from room-to-room
- Durable and easy-to-clean
- 0.5 mm lead-equivalence
- Cost-effective



Lead-Lined Vinyl Curtains are available in standard and custom-size sections that can be quickly and easily hung and fastened to each other. This photo shows how three custom-size sections have been fastened together to create an attractive, protective shield



In this emergency trauma room with two x-ray tubes, the Lead-Lined Vinyl Curtains provide superior radiation protection between both trauma room x-ray areas

Available Model(s)

57-905-7018 Lead-Lined Vinyl Curtain, 7 x 18 inch, 1.8 lb (0.81 kg), 0.5 mm LE

57-905-7024 Lead-Lined Vinyl Curtain, 7 x 24 inch, 2.3 lb (1.0 kg), 0.5 mm LE

57-905-7036 Lead-Lined Vinyl Curtain, 7 x 36 inch, 4.0 lb (1.8 kg), 0.5 mm LE

57-905 Custom Lead-Lined Vinyl Curtain. Customer-specified dimensions, 0.5 mm LE, price per square foot

57-905-1000 Grommets on Custom Curtain. Customer-specified quantity and location

57-905-2000 Velcro® on Custom Curtain, 2 inch thick. Customer-specified quantity and location, price per yard

Lead-Lined Vinyl Curtains are designed to effectively protect personnel from scatter radiation. They can be conveniently installed in a wide-range of environments, including fluoroscopy departments, emergency rooms, hospitals, and industrial radiography sites.

These attractive versatile panels are available in three standard sizes: 7 x 18, 7 x 24, and 7 x 36 inch.

Lead-Lined Vinyl Curtains are an extremely cost-effective choice for today's budget-conscious facilities. Our custom-size curtains (fabricated to your specifications) are particularly cost-effective because they are sold by the foot, so you only pay for what you need.

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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57-905-ds rev 1 27 mar 03

Emergency Responder Kit

Model 03-101

RS

Radiation Safety

Be prepared in the event of a radiation contamination emergency with this Emergency Responder Kit:

- **Promask full-face respirators** – provides maximum eye, face, and respiratory protection
- **Nuclear, biological and chemical protection filter** – designed to protect first responders against nuclear particulates, toxic or biological particulates, as well as chemical vapors and gases



- **Dosimeters** – for monitoring personal dose



- **Primalert® 35 area monitor** – reliable, continuous monitoring for ER entrance



- **Survey meters & probes** – high tech, easy-to-use for locating contamination



- **CAL/RAD Wiper™ Multi-channel Single-Well Wipe Test Counter** – full-featured multi-channel analyzer for isotope identification



- **Decontaminants** – Rad-Con™ surface cleaner, hand cleaner, and decontaminant
- **Protective clothing** – Tyvek coveralls, latex gloves, shoe covers, and hoods
- **Accessories** – respirators, mops, pails, wipes, swipes, baggies, and more

Kit components (Model 03-101)

- **Promask full-face respirators (4) (Model 02-749-1000)**
 - Nuclear, biological and chemical protection filters. Protects first responders against nuclear particulates, toxic or biological particulates, as well as chemical vapors and gases. Includes 4 Cartridges (Model 02-749-2002) for respirators
- **Direct reading pocket dosimeters (20) (Model 06-007)**
 - Measures background
 - Superior energy response: 20 keV to 2 MeV
 - Meets ANSI specifications
 - Highly resistant to shock and vibration
- **Dosimeter charger & storage case (2) (Model 06-907)**
 - Rugged leatherette-covered case
 - Holds up to 12 dosimeters
- **Primalert 35 Area Radiation Monitor (1) (Model 05-437)**
 - Assures reliable, continuous monitoring whenever radioactive materials are present
 - Radiation level displayed in bright color-coded lights
 - Emits audible and/or visible signals whenever the gamma radiation exceeds a user-preset alarm level
- **Microprocessor-based survey meters (2) (Model 190)**
 - Backlit analog/digital display
 - Interchangeable probe adapter module
 - Error-free visual indication
 - Auto-ranging
 - Multiple probe use
 - Available in SI units
- **Pancake probes (2) (Model 489-110D)**
 - Detects alpha, beta, gamma and x-rays
- **CAL/RAD Wiper Multi-Channel Analyzer Single-Well Wipe Test Counter (1) (Model 05-500)**
 - Integral-line NaI(Tl) well detector with heavy shielding for maximum sensitivity
 - Full-featured multi-channel analyzer for high resolution detail
 - Graphical display of isotope spectra and menu software
- **Check source (1) (Model 05-500-2000)**
 - NIST traceable ⁵⁷Co check source for Wipe Test Counter
- **Signs (Model 02-900-2000)***
 - Labels (2) - "Caution: Radioactive Materials" (Model 09-435)
 - Signs (2) - "Caution: Radiation Area" (Model 09-547)
 - Warning Rope (50 ft) (Model 09-705)
 - Tags (2) - "Caution: Radioactive Material" (Model 09-874)
- **Protective clothing & accessories***
 - Tyvek Coveralls (4) (Model 02-163)
 - Reusable Latex Gloves (4) (Model 02-233)
 - PVC Shoe Covers, pair (2) (Model 02-525)
 - Tyvek Hoods (4) (Model 02-860)
- **Cleaners, decontaminants, and containers***
 - Metal Drum (2) (Model 02-999)
 - Rad-Con Surface Cleaner (2) (Model 03-301)
 - Rad-Con Hand Cleaner (2) (Model 03-302)
 - Radi-Clean™ Decontaminant - quart (2) (Model 03-333)
 - Niptongs - 12 inch (2) (Model 04-301)
 - Replacement Liners (20) (Model 14-186)
- **Emergency tools (Model 02-900-1000)***
 - Mop and Handle (Models 02-900-1200 and 02-900-1100)
 - Pail (Model 02-900-1300)
 - Scrub Brush (Model 02-900-1400)
- **Accessories (Model 02-900-3000)***
 - Test Wipes, 200 pack (2) (Model 03-202)
 - Decon Cloth Test Swipes, box of 500 (2) (Model 03-204)
 - Film Marker Pens (4) (Model 07-980)
 - Absorbent Paper, rolls (2) (Model 13-101)
 - Resealable Baggies (12) (Model 07-979)
 - RSO Spill Pro (2) (Model 02-900-3095)
- **Additional items**
 - Tyvek Coveralls (11) (Model 02-163)
 - Tyvek Hoods (56) (Model 02-860)
 - PVC Shoe Covers, pair (28) (Model 02-525)
 - Radi-Clean Decontaminant - gallon (Model 03-335)

Specifications

All of the products in the Emergency Responder Kit are available individually. For complete details, see their respective data sheets

Upgrade available

Substitute survey meters, pancake probes, Cal/Rad Wiper and check source with the *IDENTIFIER* Multi-Channel Analyzer (Model 07-109)

* Included in Decontamination Kit (Model 02-900)

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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