



MalRay[®]

A Leading Asian Brand Radiation Protection Apparel

- Certified Radiation Protection
- Light Weight Comfort
- Waterproof / Tear-Resistant Fabrication
- Custom-Fit Service



MRYCAT_2606V2

LEAD FREE RADIATION PROTECTION APRON

We provide high-quality, lead-free radiation protection aprons that comply with applicable testing standards—designed to deliver effective shielding, lightweight comfort, and long-lasting durability. As a trusted healthcare equipment supplier in ASEAN, we support hospitals and medical facilities with reliable protection against scattered X-ray exposure.



Our aprons safeguard both radiation workers and patients while maintaining comfort and affordability. Engineered with advanced multi-layer composite technology, our materials reduce fluorescence and secondary scatter radiation, ensuring optimal attenuation performance without added weight. Available in *SuperLight Lead Free* and *GreenLight Light Weight* materials, our aprons are ideal for radiology, cath labs, and operating theatres—helping reduce fatigue during extended procedures.

The **RINGAN** Signature Series

SUPERlight 2.6 kg/m² (0.25mmPb)

Lead Free - Lightest lead free material

GREENlight 3.0 kg/m² (0.25mmPb)

Light Weight - Low cost lead free material

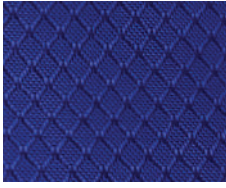
LEAD, LOW LEAD OR LEAD FREE APRON?

Below is a comparison Lead (Lead Polymer), Low Lead and Lead Free apron in various aspects, to help the user in determination of type of apron to be used.

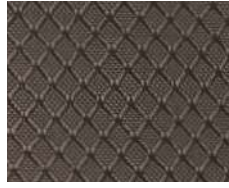
Media	Benefits	Protection	Attenuation	Weight
Lead (Regular Lead)	Most Economical and Recyclable	100% Lead in a vinyl resin	0.5mmPb Equiv. Protection averages > 96% Attenuation	Around 10 times heavier than normal apron of the same size
Low Lead	Lighter than Regular Lead and Recyclable	Composed of 75-85% metallic lead metal, encapsulated in a vinyl resin and plasticiser matrix.	0.5mmPb Equiv. Protection averages > 96% Attenuation	Around 20% lighter than lead
Lead Free	Lightest Weight, no lead and Environmentally Friendly	Composed of 75-85% heavy metal composites, NOT including lead, encapsulated in a vinyl resin and plasticiser matrix.	0.5mmPb Equiv. Protection averages > 96% Attenuation	Around 20% lighter than Low Lead

FABRIC COLOUR

RISPTOP NYLON FABRIC + PU COATING



FLRS-06
SAPHIRE



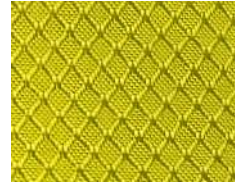
FLRS-10A
ONYX



FLRS-14
RUBY



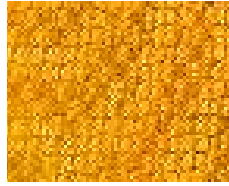
FLRS-31
EMERALD



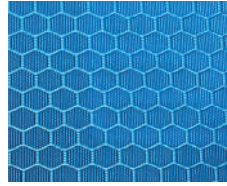
FLRS-39
PERIDOT



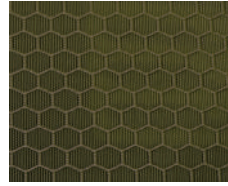
FLRS-16
SHADOW



FLRF-04
GOLD



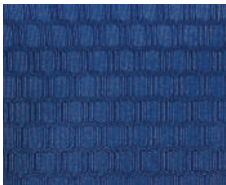
FLRF-05
SKY BLUE



FLRF-15
ARMY KHAKI



FLRF-17
DEEP BLUE



FLRH-37
LAKE BLUE

420D OXFORD POLYESTER + PU COATING



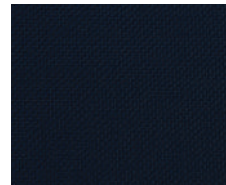
ZLOF-03
BLUE



ZLOF-08
WINE RED



ZLOF-12
OLIVE



ZLOF-09
NAVY BLUE



ZLOF-04L
ORANGE



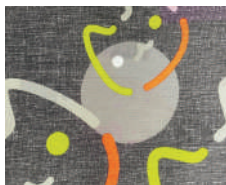
ZLOF-17L
APPLE GREEN



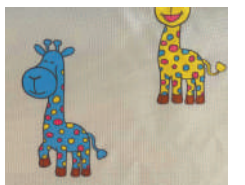
FLOF-06
ROYAL BLUE



ZLOF-BR
BEAR



ZLOF-CT
CAT




ZLOF-GF
GIRAFFE

* Please contact our office to check the fabric availability

LOCAL TEST

Sample materials tested by Agensi Nuklear Malaysia

In addition to various international test certificates, materials use to fabricate MALRay low lead and lead free apron has obtained relevant test certificates from Agensi Nuclear Malaysia.



MOSTI
AGENSI NUKLEAR MALAYSIA
 Kementerian Sains, Teknologi dan Inovasi
 Bangi, 43000 Kajang, Selangor Darul Ehsan, Malaysia
 Tel: 603-8911 2000 Faks: 603-8911 2173 Web: <https://www.nuclearmalaysia.gov.my>

SIJIL UJIAN KETEBALAN PERISAI

NO. SIJIL: D(E6(31)) 2503015

A: KETERANGAN MENGENAI PEMILIK SAMPEL

Nama Pemilik: Eightfold Sdn Bhd,
 Alamat: 69-1, Jalan SS19/6,
 47500 Subang Jaya,
 SELANGOR.

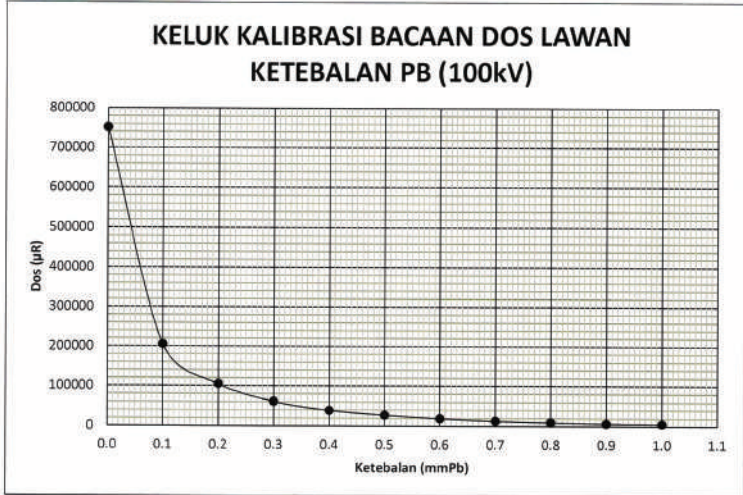
B: KETERANGAN MENGENAI SAMPEL YANG DIUJI

Bil	SampeL yang diuji	Titik	Ketebalan Kesetaraan Plumbum (mmPb)	Ketidak seragaman (%)
1	Lead Free Sheet MALRAY Wrap Round Guard, Double Side Apron (size M) Protection Front 0.5mmPb Low Lead, and Back 0.25mmPb (model EWWA-3) S/N: KMD230248	A	0.52	1.5
		B	0.52	
		C	0.52	
		D	0.25	0.6
		E	0.25	

C: KEPUTUSAN DAN PENGESAHAN

Adalah dengan ini disahkan bahawa sampel di atas telah melalui ujian ketebalan perisai pada 06.03.2025 dan didapati keputusan ketebalan kesetaraan Pb adalah seperti tertera di atas. Walaubagaimanapun ujian ini adalah sah bagi posisi-posisi yang telah diukur sahaja.

KELUK KALIBRASI BACAAN DOS LAWAN KETEBALAN PB (100kV)



Rajah 1: Keluk kalibrasi (*calibration curve*) bacaan dos (μR) melawan ketebalan Pb (mm) pada jarak 50 cm SSD.

Jadual 2: Bacaan dos untuk pelbagai ketebalan Pb semasa pengukuran keluk tentukan

Ketebalan (mmPb)	Purata Dose (μR)
0.0	751833.33
0.1	205400.00
0.2	105000.00
0.3	61033.33
0.4	38986.67
0.5	27093.33

Custom Made Benefit : Custom made ensure best fit and comfort when wearing. On the other hand, it reduces overall weight of the apron by around 5 – 10%. Please fill out the following form and submit for a pricing quote on all custom apparel. All custom sized apparel will include an additional fee for each item ordered. Custom sized apparel is non-refundable, non-returnable.

How to Measure

Get the best fit by following these quick and easy measurement steps:

A ~ Neck

Measure circumference around the neck. Ensure the tape sit comfortably.

B ~ Shoulder

Locate the bony points at each shoulder. Measure from one shoulder joint straight across to the other joint.

C ~ Chest

Position the tape across the nipple line . Measure circumference around the fullest part of the chest.

Tips : Relaxed the chest and arms down. Ensure the measuring tape stays parallel to the floor, both front and back.

D ~ Waist

Position the tape across the belly button height and measure circumference around the waist.

Tips : Relaxed the stomach when measure. Ensure the measuring tape stays parallel to the floor, both front and back.

E ~ Hips

Measure circumference around the widest part fo the hips and buttocks.

Tips : Ensure the measuring tape stays parallel to the floor, both front and back.

F ~ Length

Locate the cervicale at the back of the neck. Measure from this point straight down to the knee cap.

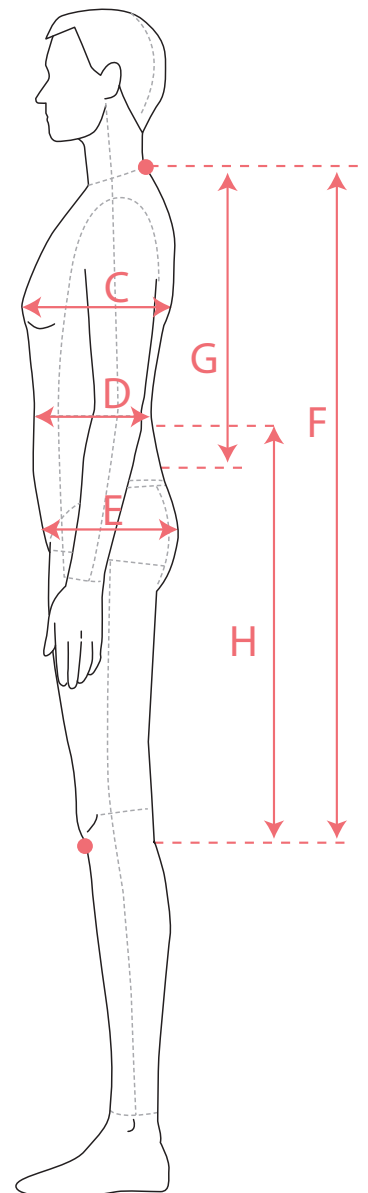
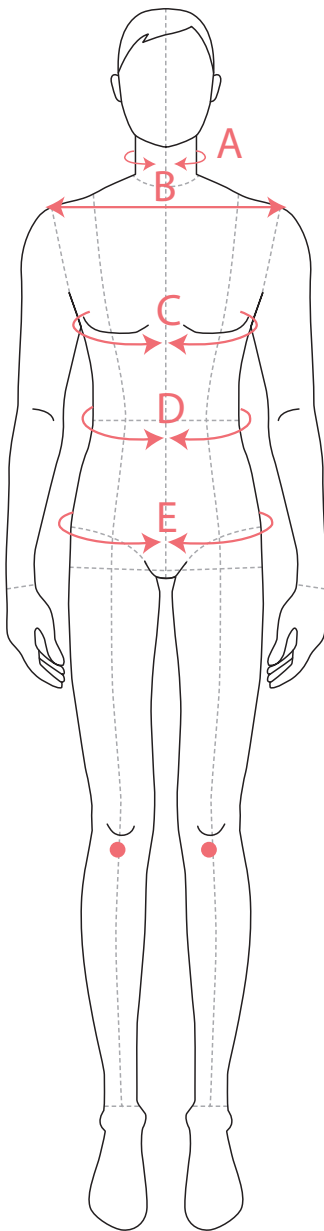
For Vest and Skirt Length

G ~ Vest Length

Measure the cervicale at the back of the neck. Measure from this point straight down to 3" below belly button.

H ~ Skirt Length

Measure from belly button height to knee cap.



CUSTOM SIZE APPAREL

Please use the provided CAT numbers and pricing for each custom apparel item

ACP1	For custom made aprons, vests and skirts
ACP2	For custom made accessories items (ex: Thyroid, Gonadal, Semi Guard)
ACP3	For embroidery up to double line and a maximum of 20 letters

Company Name : _____ Name : _____

Contact No. : _____ Email : _____ Date : _____

Apron CAT#: _____ Description : _____

Lead Type : SuperLight Lead Free / GreenLight Light Weight Lead Equivalent : _____ mmPb

Fabric color code : _____

EMBROIDERY LINE 1, UP TO 10 LETTERS: _____

EMBROIDERY LINE 2, UP TO 10 LETTERS: _____

BODY MEASUREMENTS (all in cm)

GENDER : M / F HEIGHT : _____ cm

A	Neck	_____ cm
B	Shoulder	_____ cm
C	Chest	_____ cm
D	Waist	_____ cm
E	Hips	_____ cm
F	Length	_____ cm
G	Vest Length (For Vest and Skirt Apron)	_____ cm
H	Skirt Length (For Vest and Skirt Apron)	_____ cm

RADIATION PROTECTION APRON

FOR STAFF & PATIENT USE

DOUBLE SIDE FULL WRAP (FULL OVERLAP APRON)

Wrap around, full-body protection coat-style garment. Distributes weight between shoulders and hips. 0.5mmPb equivalency protection front, 0.25mmPb back. Buckle closure. Generous armholes for EZ-fit.

Suitable for use in medical imaging, OT, cathlab and diagnostic department that poses risk of frequent exposure to X-ray environment.

- CAT# : EGWA / EWWA
- Material : SuperLight Lead Free / GreenLight Light Weight
- Lead Equiv. : Front 0.5 / Back 0.25mmPb
- Embroidery Option : YES
- Size : S , M , L , XL , 2XL, 3XL/Custom Made



DOUBLE SIDE FULL OVERLAP VEST AND SKIRT

Full wrap full overlap vest and skirt 2 pieces design, distributes weight between shoulders and hips. 0.5mmPb equivalency protection front, 0.25mmPb back. Combination of velcro and buckle closure to secure fastening position and ensure comfortable fit. Generous armholes for EZ-fit.

Suitable for use in medical imaging, OT, cathlab, diagnostic department that poses risk of frequent exposure to X-ray environment.

- CAT# : EGVG , EGKG / EWVG , EWKG
- Material : SuperLight Lead Free / GreenLight Light Weight
- Lead Equiv. : Front 0.5 / Back 0.25mmPb
- Embroidery Option : YES
- Size : S , M , L , XL , 2XL, 3XL/Custom Made



SINGLE SIDE FRONT APRON WITH ELASTIC BACK

All Purpose Front Protection Apron. EZ-On / EZ-Off. Available with an easy criss-cross elastic back, hook and loop closure on the front. Perfect for every day imaging protection

Suitable for use in medical imaging / diagnostic department that poses risk of frequent exposure to X-ray environment.

- CAT# : EGEZ / EWEZ
- Material : SuperLight Lead Free / GreenLight Light Weight
- Lead Equiv. : 0.35 / 0.5mmPb
- Embroidery Option : YES
- Size : P, S , M , L , XL , 2XL, 3XL/Custom Made



DOUBLE SIDE FULL WRAP PARTIAL OVERLAP APRON - MAX GUARD

Wrap around, full-body protection coat-style garment for MAXIMUM PROTECTION. Distributes weight between shoulders and hips. 0.35/0.5mmPb equivalency protection front, Velcro / Buckle closure. Generous armholes for EZ-fit.

Suitable for use in medical imaging, OT, cathlab and diagnostic department that poses risk of frequent exposure to X-ray environment.

CAT# : EGMG
 Material : SuperLight Lead Free
 Lead Equiv. : 0.35 / 0.5mmPb
 Embroidery Option : YES
 Size : S , M , L , XL , 2XL, 3XL/Custom Made



SURGICAL DROP AWAY APRON

The drop away apron is projected to be used at operation theatre where apron is required for surgery for shorter periods of time. The apron is fasten on both shoulders with quick release buckles to allow the apron to be removed during procedures when protection is no longer required. Pressing the shoulder clips through the sterile gown allows the apron to drop to the floor without compromising the sterility of the healthcare professional.

CAT# : EGSA / EWSA
 Material : SuperLight Lead Free / GreenLight Light Weight
 Lead Equiv. : 0.35 / 0.5mmPb
 Size : S , M , L , XL , 2XL, 3XL/Custom Made



DENTAL GUARD

Dental apron provides protection in the case of the vertex occlusal examination, especially in a patient who is, or may be, pregnant. On the other hand, the use of a lead apron may reassure patients that every effort is being made to ensure their safety.



Panaromic Dental Drapes - with collar

CAT# : EWDC-5A/ 5C
 Material : GreenLight Light Weight
 Lead Equiv : 0.5mmPb
 Size : Adult - 700mm(L) x 570mm(W)
 Child - 580mm(L) x 450mm(W)

Panaromic Dental Drapes

CAT# : EWDD-5A
 Material : GreenLight Light Weight
 Lead Equiv : 0.5mmPb
 Size : Adult - 700mm(L) x 610mm(W)

Panaromic Dental Drapes - Short

CAT# : EWDS-5A
 Material : GreenLight Light Weight
 Lead Equiv : 0.5mmPb
 Size : Adult - 380mm(L) x 420mm(W)

THYROID GUARD

Thyroid/ collar guard should be used in all examinations where the thyroid may be exposed to the main beam or to a considerable amount of scatter radiation. MALRAY thyroid guards are design to provide essential shield area to cover thyroid gland position and at the same time remain soft to reduce patient discomfort.



Thyroid Guard - Monolithic type

CAT# : EGTM / EWTM
 Material : SuperLight Lead Free / GreenLight Light Weight
 Lead Equiv : 0.35 / 0.5mmPb
 Neck size : Adult - 15" to 23"
 Child - 11" to 16"



Thyroid Guard - Visor type

CAT# : EGTG / EWTG
 Material : SuperLight Lead Free / GreenLight Light Weight
 Lead Equiv : 0.35 / 0.5mmPb
 Neck size : 15" to 23"



Thyroid Guard - All round (US) type

CAT# : EGTR / EWTR
 Material : SuperLight Lead Free / GreenLight Light Weight
 Lead Equiv : 0.35 / 0.5mmPb
 Neck size : 15" to 21"

HAT GUARD

Protection for head. Hook and Loop fitted closure.



CAT# : EGCS / EWCS
 Material : SuperLight Lead Free
 GreenLight Light Weight
 Lead Equiv. : 0.5mmPb
 Head Circumference up to 23"

HAND GUARD

Five fingered protection for full dexterity. 0.5mmPb. Equivalency. Durable, soft vinyl covering. Sell as a pair.



CAT# : ELHG-5
 Material : Lead LT
 Lead Equiv. : 0.5mmPb
 Size : 350mm(L) x 130mm(W)

HALF APRON - LAP GUARD



Easy-to-use hook and loop / Buckle Closure Excellent protection for patient and staff.

CAT# : EWLK
 Material : GreenLight Light Weight
 Lead Equiv. : 0.35 / 0.5mmPb
 Size : P , S , M , L , XL , FAB-1, FAB-2

BREAST GUARD



The breast shield is primarily used in head and neck imaging. The shield features adjustable belt for proper positioning. The neck area is empty, allowing visibility of the upper spine and bones during x-ray, while offering protection to the breast area.

CAT# : EGBG / EWBG
 Material : SuperLight Lead Free / GreenLight Light Weight
 Lead Equiv : 0.5mmPb
 Size : Adult - 7"(L) x 6"(W)
 Child - 4 1/2"(L) x 4"(W)

DENTAL THYROID GUARD



Dental thyroid/ collar guard should be used in dental examinations where the thyroid may be exposed to the main beam or to a considerable amount of scatter radiation.

Dental Collar

CAT# : EWTD-5L
 Material : GreenLight Light Weight
 Lead Equiv : 0.5mmPb
 Neck size : 12" - 20"

GONADAL GUARD / OVARIAN GUARD



Protects the ovaries of female or gonad of male patients during X-rays in medical diagnostics. The unite design velcro belt with snap buckle fastener guarantees easy putting on and taking off and a comfortable size adjustment. Comply with IEC 61331-1. Attached belt with 1" buckle. 0.5mmPb equivalency protection. Available in three sizes.

Belt type (Set of 3)

CAT# : EGOB / EWOB
 Material : SuperLight Lead Free / GreenLight Light Weight
 Lead Equiv. : 0.5 / 1.0mmPb
 Size : S - 140mm(L) x 115mm(W)
 M - 200mm(L) x 165mm(W)
 L - 220mm(L) x 180mm(W)

WHY YOU SHOULD PROTECT YOUR EYES FROM RADIATION EXPOSURE

Requiring hospital staff, doctors and x-ray technicians to wear lead glasses is an important step to helping prevent x-ray radiation damage to the eyes. Lead glasses can greatly reduce the risk of x-ray radiation exposure to only 2-3%.

There are several risks with leaving the eyes unprotected from x-ray radiation exposure. At the time of unprotected x-ray radiation exposure, most people do not experience any pain. However, it is very common to experience a dull pain in exposed tissues, including the eyes, within 1 to 3 hours of the x-ray radiation exposure. Exposure to x-ray radiation can also cause swelling and first degree burns.

COVER-GUARD



Comfortable protection over regular glasses. Excellent front and side visibility. Provides limited splash protection. Can be worn over prescription eyewear. Regular hinges with molded nose piece. Includes 0.75mmPb glass side shields. Includes premium case.

CAT#	: ETEC-6	Lead Equiv.	: 0.75mmPb
Frame	: Black rubberized nylon	Weight	: 105g

FITOVER GUARD



Designed to be worn over prescription eye glasses. Optional detachable inner frame to fit permanent prescription lenses. Lead glasses for radiation protection. Fits large sized faces. Above industry standard protection with 0.75mmPb lead glass lenses. Includes comfortable cotton retention strap and protective storage case. (Prescription lens by others)

CAT#	: ETEF-6	Lead Equiv.	: 0.75mmPb
Frame	: Rubberized nylon	Weight	: 112g

COMFORT GUARD



Light weight design, lead glasses for radiation protection. The lens is resistant to minor wear and scratches. Ergonomics design offers maximum comfort. Lead glass lenses with 0.75mmPb protection can be custom made with prescriptions. Includes comfortable retention strap and protective storage case.

CAT#	: ETEM-6	Lead Equiv.	: 0.75mmPb
Frame	: Rubberized nylon	Weight	: 70g (standard unit only)

X-RAY PROTECTION GLASSES

X-ray protective glasses is lightweight and comfortable, designed to reduce scatter radiation by as much as 60%, special flipping design with panorama view. (actual reduction is dependent upon imaging technique used)



CAT# : EAEP (NON-FLIP)
 Material : Lead Acrylic
 Lead Equiv : 0.125mmPb
 Weight : 55g - 65g



CAT# : HKD-7/7A (FLIPPABLE)
 Material : Lead Acrylic
 Lead Equiv : 0.125mmPb
 Weight : 70g - 75g

X-RAY PROTECTION FACE SHIELD

Design for the protection of eyes and face during radiological procedures to reduce potential hazards from radiation exposure. Because of the multi-adjustment 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.



X-RAY PROTECTION FACE SHIELD - FULL FACE STYLE

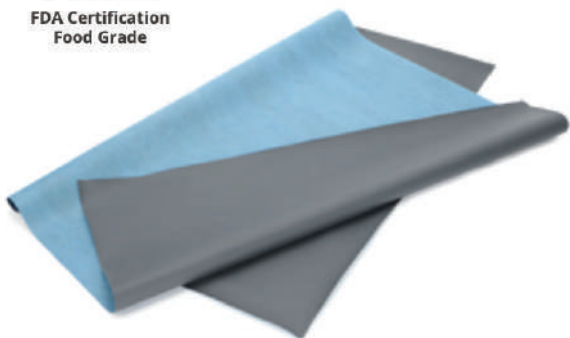
CAT# : EAFF
 Material : Lead Acrylic
 Lead Equiv : 0.125mmPb
 Weight : 360g



X-RAY PROTECTION FACE SHIELD - HALF FACE STYLE

CAT# : EAFH
 Material : Lead Acrylic
 Lead Equiv : 0.125mmPb
 Weight : 450g

DISPOSABLE SCATTER DRAPE



Disposable scatter drapes are designed to protect surgeons and technicians from scatter radiation during surgical procedures without adding extra weight. These drapes are lead-free and latex-free, offering tailored coverage for various procedures. Made from our advanced Prolite core material, disposable scatter drapes provide over 20% more protection against higher radiation exposures compared to competitors. The exterior features our highly absorbent Activ material with a plastic laminated inner layer for enhanced protection. Additionally, high-quality 3M adhesive ensures that the drape remains securely in place throughout the procedure.

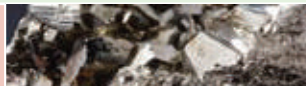

Shielding Efficiency :

More than 60% under 80kV

Meets BS EN 61331-1:2014 test requirements for determination of attenuation characteristics of lead-free vinyl materials using improved wide-beam geometry (Eder and Schlattl, 2018)

WORKING PRINCIPLE

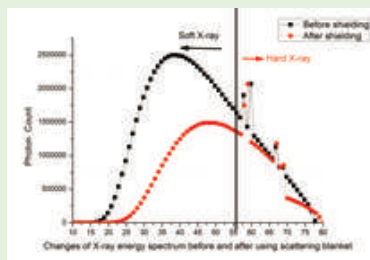
The core materials are Aluminum and Tungsten, Aluminum shields low energy soft X photons from the patient's scattering, and Tungsten shields scattered rays and secondary fluorescence.

Aluminium	13	Shield low energy soft X photons	
Tungsten	74	Shield scattered rays and secondary fluorescence	

ADVANTAGE

Reduce the radiation dose and improve clarity of medical scans during surgery

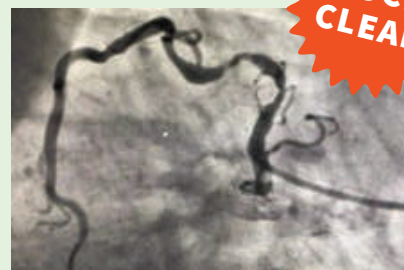
EFFECTS ON IMAGING



Changes of X-ray energy spectrum before and after using



Before

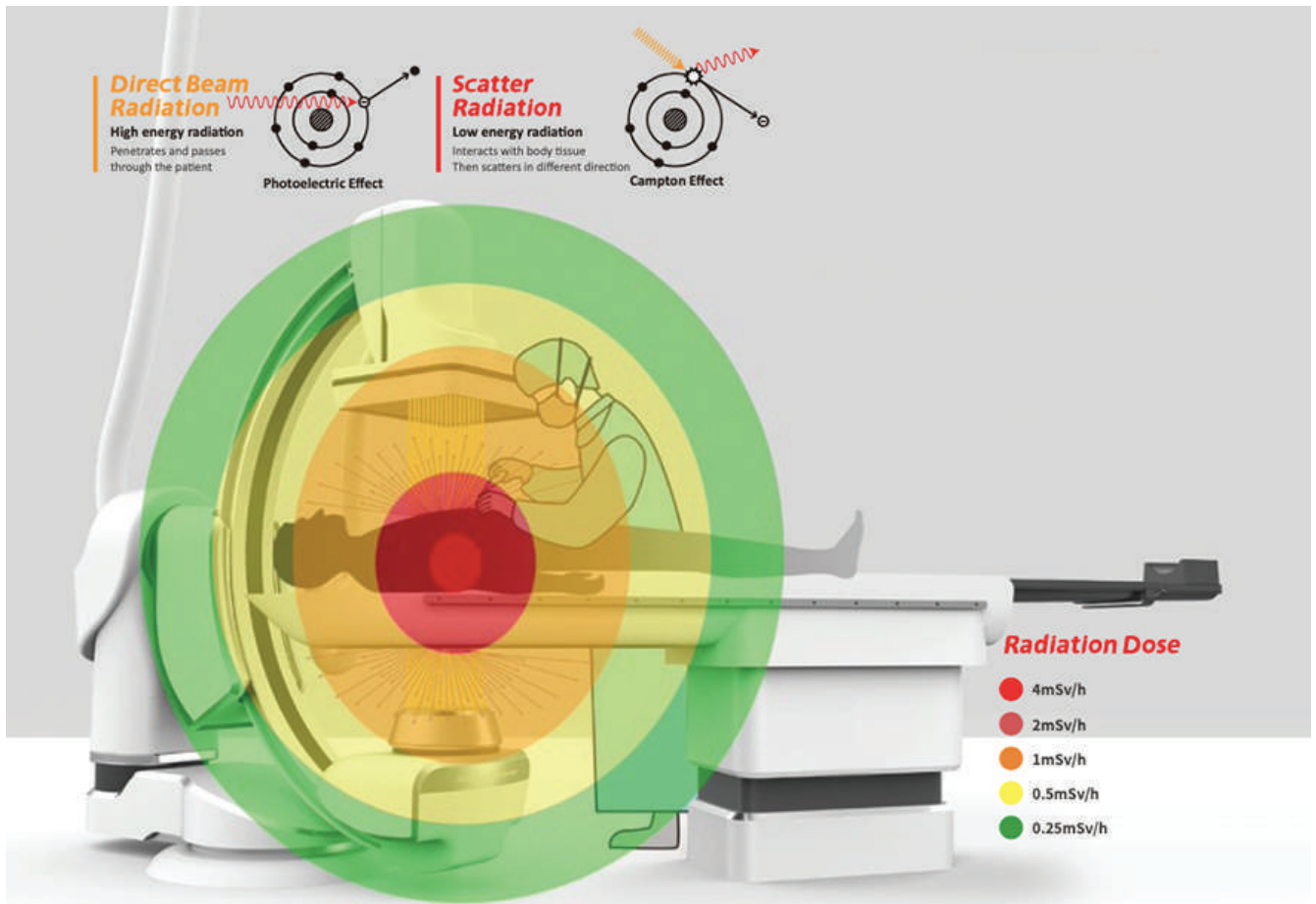


After

MUCH CLEAR

Energy	80kV
Shielding Efficiency	60%

DISPOSABLE SCATTER DRAPE, COLLAR & CAP



Through the shielding of low-energy radiation and secondary scattering X-ray, Disposable Scatter Drape can improve clarity of medical scans in interventional surgery, and effectively reduce the radiation dose received by patients, as well as can reduce the annual radiation dose of the doctors and weak protective parts, such as hands, arms, face, eyes and head effectively.

ADVANTAGE



ECO-FRIENDLY



STERILE



DISPOSABLE



HIGH ABSORBANCY



CONVENIENT AND AFFORDABLE



LIGHT WEIGHT



LATEX FREE



3M ADHESIVE

DISPOSABLE THYROID & CAP

The thyroid collars and caps are available in a disposable version, made of a soft spun bound material. This style provides a single use hygienic option. Absorbent, non irritating liner protects you from dirt and perspiration.



Disposable Thyroid

CAT# : EDDTHY
Material : Lead Free, Latex-free
Lead Equiv. : 0.125 / 0.25mmPb
Size : Small / Large

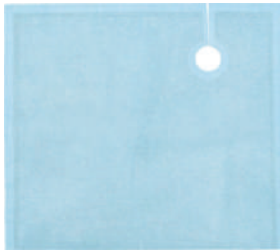


Disposable Cap

CAT# : EDDCAP-2
Material : Lead Free, Latex-free
Lead Equiv. : 0.125mmPb
Size : Free Size

DISPOSABLE DRAPE

During interventional surgery, disposable drape is placed on the surgical sheet, and spread over the patient's irradiated area.



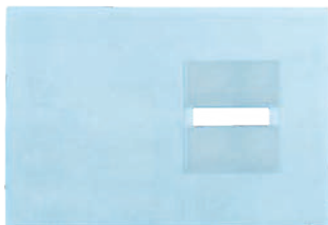
Angiography Drape

CAT# : EDAD
Material : Lead Free, Latex-free
Fenestration : 2" Circle
Size : 370mm x 420mm
Procedures : Angiography, Coronary Catheterization, UFE, Pelvic Surgery and TACE
Attenuation at 90kVp : 50% / 70% 90%



Biliary Split Drape

CAT# : EDBD
Material : Lead Free, Latex-free
Fenestration : 5" Slit
Size : 370mm x 420mm
Procedures : Transjugular intrahepatic portosystemic shunt (TIPS)
Attenuation at 90kVp : 50% / 70% 90%



Dialysis Drape

CAT# : EDDSD
Material : Lead Free, Latex-free
Fenestration : 114mm X 9" Rectangle Slit
Size : 370mm x 229mm
Procedures : Dialysis access and declotting, Fistulagram
Attenuation at 90kVp : 50% / 70% 90%



EP Left Subclavian Drape

CAT# : EDEPD
Material : Lead Free, Latex-free
Fenestration : 3.25" x 2.25" Scoop
Size : 280mm x 410mm
Procedures : Bi-ventricular pacemaker implants, BI-ventricular pacing & ICS procedures
Attenuation at 90kVp : 50% / 70% 90%

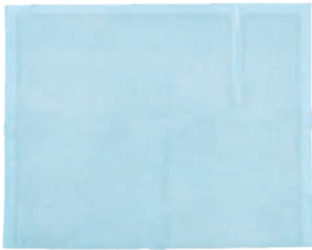
DISPOSABLE DRAPE

**EP Drape - Large**

CAT# : EDEPD-L
 Material : Lead Free, Latex-free
 Fenestration : 5.75" x 3" Scoop
 Size : 410mm x 410mm
 Procedures : Bi-ventricular pacemaker implants, BI-ventricular pacing & ICS procedures
 Attenuation at 90kVp : 50% / 70% 90%

**EP Drape - Small**

CAT# : EDEPD-S
 Material : Lead Free, Latex-free
 Fenestration : 5.75" x 3" Scoop
 Size : 280mm x 410mm
 Procedures : Bi-ventricular pacemaker implants, BI-ventricular pacing & ICS procedures
 Attenuation at 90kVp : 50% / 70% 90%

**Jugular Access / TIPS Drape**

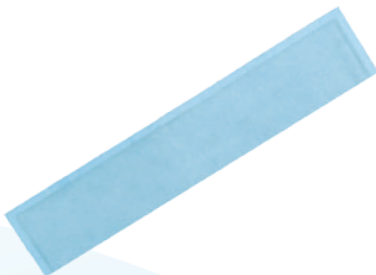
CAT# : EDJUG
 Material : Lead Free, Latex-free
 Fenestration : 5" Slit
 Size : 350mm x 450mm
 Procedures : Transjugular intraheptic portosystematic shunt (TIPS)
 Attenuation at 90kVp : 50% / 70% 90%

**Multipurpose Drape**

CAT# : EDMPD
 Material : Lead Free, Latex-free
 Fenestration : None
 Size : 350mm x 450mm
 Procedures : Needle Biopsy or Puncture procedures
 Attenuation at 90kVp : 50% / 70% 90%

**Multipurpose Drape with Fenestration**

CAT# : EDMPDF
 Material : Lead Free, Latex-free
 Fenestration : 3.5" x 2" Rectangle
 Size : 350mm x 450mm
 Procedures : Needle Biopsy or Puncture procedures
 Attenuation at 90kVp : 50% / 70% 90%

**Peripheral Drape**

CAT# : EDPPD
 Material : Lead Free, Latex-free
 Fenestration : None
 Size : 305mm x 889mm
 Procedures : Peripheral procedures w/ access through the femoral artery
 Attenuation at 90kVp : 50% / 70% 90%

RADIATION PROTECTION GLOVES

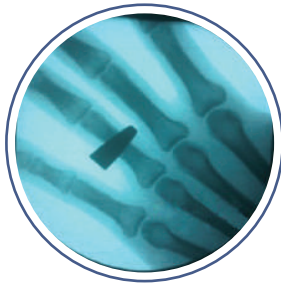
At Surgitex, protecting these high-risk areas is our priority. Our latest innovation, the disposable lead-free latex radiation protection gloves, is designed to deliver the highest possible protection exactly where it is needed most.

Lightweight, comfortable, and completely lead-free, Surgitex gloves provide effective radiation shielding while supporting easy, eco-friendly disposal, offering a safer and smarter solution for modern clinical environments.

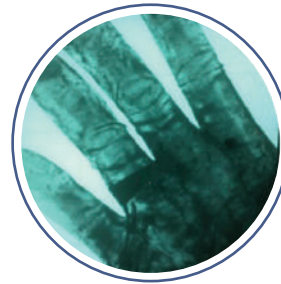
**0%
LEAD 100%
SAFE**



What your hands look like in X-RAY with and without "Surgitex" RAG



WITHOUT
SURGITEX RAG



WITH
SURGITEX RAG

X-ray Attenuation efficiency of the disposable radiation protection gloves for interventional surgery

Model	thickness of gloves	Attenuation (%)
A10	0.1mm	>50
A30	0.3mm	>60

Testing condition:

Equipment : SIEMENS digital subtraction angiography (DSA)

Working conditions at test: SW-SS : on ; CU Filter: 0.1mm ; 70kV ; 20mA ; Duration of radiation exposure: 60s ; Non-direct radiation field ; Testing position was 75cm horizontally distant from the center of radiation field of DSA.

Dosimetry validation of the X-radiation Attenuation of the disposable radiation protection gloves for the interventional surgery on gradient tube voltage

DSA Tube Voltage						
Model	thickness	60 kV	70 kV	80 kV	100 kV	120kV
Skin dose reduction (%)						
A10	0.1mm	53%	50%	38%	32%	30%
A30	0.3mm	70%	60%	50%	47%	40%

Testing condition:

Equipment : SIEMENS digital subtraction angiography (DSA)

Working conditions at test: SW-SS : on ; CU Filter: 0.1mm ; Duration of radiation exposure: 60s ; Non-direct radiation field ; Testing position was 75cm horizontally distant from the center of radiation field of DSA.

"SURGITEX" RAG ARE



FDA APPROVED



SINGLE USE ONLY



CE APPROVED



RADIATION PROTECTION



STERILIZED BY
GAMMA IRRADIATION



LEAD-FREE

Application to:

- Diagnostic heart catheterization
- Coronary angioplasties
- Angiocardiology
- Gynecology
- Orthopedics
- Nuclear Medicine
- Examination procedures using Fluoroscopy

SURGITEX Lead-free radiation protection gloves

- Radiation Protection Lead-free radiation protection gloves
- Powder-free, lead-free
- Hand protection from radiation exposure
- 100% safe, 0% lead , Single use only
- Gamma irradiation sterilized shelf life : 3 years

DISPOSABLE GLOVES



CAT# : A10
 Thickness : 0.1mm
 Size : 6.5 , 7 , 7.5 , 8 , 8.5 , 9
 Lead Equiv : 53% @ 60kV

CAT# : A30
 Thickness : 0.3mm
 Size : 6.5 , 7 , 7.5 , 8 , 8.5 , 9
 Lead Equiv : 70% @ 60kV

MOBILE LEAD SCREEN WITH WINDOW



Mobile Lead Screen with lead Screen features a 2.00mm Pb equivalence and comes in two standard sizes. Custom made model is available.

- with 4 lockable castle wheels
- lead glass window
- Lead Equivalent = 2.0mmPb

CAT#: : MLS2-S
 Dimension : Standard Panel - MLS2-S-09 : 850mm(W) x 1880mm(H)
 : Wide Panel - MLS2-S12 : 1200mm(W) x 1880mm(H)
 Glass size : 150mm x 200mm , 200mm x 300mm , 300mm x 400mm

PHYSICIAN PROTECTION MOBILE SCREEN



A dramatic reduction in radiation exposure to the whole body can be achieved when this shield is properly utilized. It creates an extensive safety zone within which the practitioner can work. The wide shadow cast by the shield also provides protection to assisting personnel.

- Height adjustable range from 1380mm to 1680mm to fit the table.
- 0.5mmPb equivalent, suitable for use in the interventional procedures.
- lead acrylic window with cut corner.
- On the lower side, the lead-free curtains, suspended beneath the window, are adjustable for width. The front curtain can slide out and extend to the table side to block the scatter radiation effectively.

CAT# : MBPP-5
 Adjustable range : 1380mm - 1680mm
 Stainless Steel Base with 4 swivel wheels, 2 lockable

MOBILE CURTAIN - RADIATION SHIELD



- Full stainless steel 304 construction
- Stable frame and smooth movement
- Easy disassemble for long distance travelling

CAT# : MRSA-SS + EWMC
 Lead Shield Dim : 760mm(H) x 600mm(W)
 Base dimension : 550mm x 450mm
 Overall Height : 1540mm
 Adjustable range : 780mm - 1500mm
 Stainless Steel Base with 4 swivel wheels, 2 lockable

MOBILE LEAD SHIELD WITH ACRYLIC HALF GLASS



The Mobile lead shield with acrylic half glass can be easily raised and lowered by hand and stays in position thanks to the perfectly counter-balanced internal springs. The high quality steel construction and stainless springs provide a lifetime of trouble-free use.

CAT#: : MLS1-HG-HK
 Lead Equiv. : 0.5mmPb (Acrylic Glass)
 Lead Shield : 1.0mmPb
 Overall Size : 1800mm(H) x 900(W)
 Adjustable range : 1300mm - 1800mm

CEILING MOUNTED OVERHEAD LEAD ACRYLIC BARRIER WITH LEAD CURTAIN - TYPE I



- Stable radiation barrier shield with 360 degrees of rotation which fits into exam room / OT of any size.
- A lead curtain provide flexible radiation protection and a stabilized suspension arm constructed from corrosion resistant powder coated alloy / stainless steel.

CAT#: : ELAC-CD
 Lead Acrylic Dim : 600mm x 400mm
 Lead Curtain Dim : 600mm x 350mm
 Lead Equiv. : 0.5mmPb (Lead Acrylic and Lead Curtain)
 Lower Arm Length : 800mm
 Upper Arm Length : 820mm
 Hanger Pillar Length : 500mm - 850mm (made to order)

CEILING MOUNTED OVERHEAD LEAD ACRYLIC BARRIER WITH TORSO CUTOUT - TYPE II



- Stable radiation barrier shield with 360 degrees of rotation which fits into exam room / OT of any size.
- A torso cut-out to help fit most patients and a stabilized suspension arm constructed from corrosion resistant powder coated alloy / stainless steel .

CAT#: : ELAT-CD
 Lead Acrylic Dim : 600mm x 800mm with Torso Cutout
 Lead Equiv. : 0.5mmPb (Lead Acrylic)
 Lower Arm Length : 800mm
 Upper Arm Length : 820mm
 Hanger Pillar Length : 500mm - 850mm (made to order)

MOBILE OVERHEAD LEAD ACRYLIC BARRIER WITH WITH LEAD CURTAIN - TYPE I



- Stable radiation barrier shield with 360 degrees of rotation which fits into exam room / OT of any size.
- A lead curtain provide flexible radiation protection and a stabilized suspension arm constructed from corrosion resistant powder coated alloy / stainless steel.

CAT#: : ELAC-MB
 Lead Acrylic Dim : 600mm x 400mm
 Lead Curtain Dim : 600mm x 350mm
 Lead Equiv. : 0.5mmPb (Lead Acrylic and Lead Curtain)
 Adjustable range : 800mm - 1800mm

MOBILE OVERHEAD LEAD ACRYLIC BARRIER WITH TORSO CUTOUT - TYPE II



- Stable radiation barrier shield with 360 degrees of rotation which fits into exam room / OT of any size.
- A torso cut-out to help fit most patients and a stabilized suspension arm constructed from corrosion resistant powder coated alloy / stainless steel.

CAT#: : ELAT-MB
 Lead Acrylic Dim : 600mm x 800mm with Torso Cutout
 Lead Equiv. : 0.5mmPb (Lead Acrylic)
 Adjustable range : 800mm - 1800mm

MOBILE LEAD APRON HANGER



Solid and durable mobile 5/10 swing arm apron rack organizes and protects up to 10 X-ray aprons in a traditional garment-style rack. Ideal radiation protection storage solution for a busy radiology department. 10 pivoted arms fan out for flexibility to easily store and retrieve aprons. Locking casters glide smoothly for easy mobility.

- CAT#: : ESMH-5F-SS (5-arms-Standard) / ESMH-5E-SS (5-arms-For Vest & Skirt)
 ESMH-10F-SS (10-arms-Standard) / ESMH-10E-SS (10-arms-For Vest & Skirt)
- Materials: : Full stainless steel arms and frame
 : 75mm swivel wheel x 4, 2 lockable diagonally fit.
- Dimension : 540mm(L) x 570mm(D) x 1340mm(H)
- Overall weight : 5-arms - 17kg, 10-arms - 22.5kg
- *the dimension varies slightly between batches.

WALL MOUNTED APRON HANGER



STANDARD
- 3 ARMS

3-arms / 5-arms stainless steel hangers with mounting plate made of grade 304 stainless steel. Arm height 192mm from the lowest joint to the highest point. The hanger arms can flatten out nearly 180 degrees. Arms extend perpendicular from the wall on which the unit is mounted 530mm at the maximum point. When stored flat, the overall dimension is 0mm(L) x 260mm(W) x 160mm(H)



STANDARD
- 5 ARMS

- CAT#: : ESWH-3F-SS (Standard 3-Arms - with end ring and middle hooks)
 ESWH-5F-SS (Standard 5 Arms - with end ring and middle hooks)
 ESWH-5E-SS (For Vest and Skirt - lower layer hook and end ring)



FOR VEST
& SKIRT

- Product dimension : 530mm(L) x 250mm(D) x 250mm(H)
- Package dimension : 800mm(L) x 300mm(D) x 200mm(H)
- Max. Load : 5-arms - 70kg
- Overall Weight : 3 Arms - 2.7kg, 5 Arms - 4.5kg

WALL MOUNTED APRON HANGER – PEG RACK (ECONOMIC)



- 1 / 3 / 5 aprons rack (stainless steel)
- Stainless steel apron hanger organizes and protects up to 5 X-ray aprons in a wall mounted rack with 140mm pegs.

CAT# : ESWH-5C-SS

APRON HANGER HOOK-5 HOOKS



- Stainless steel apron hanger organizes and protects up to 5 X-ray aprons in a wall mounted rack

- CAT# : ESHH-5H-SS
- Materials: : Stainless Steel 304
- Dimension : 55mm(H) x 370mm(L) X 45MM(D), 8mm hook diameter, plate 30mm(W) x 370mm(L)

SINGLE HOOK FOR SINGLE HANGER



- Sturdy wall mounted hook for imaging apron use

- CAT# : ESSH-1H-SS
- Materials: : Stainless Steel 304
- Dimension : 45mm(H) x 68mm(L) x 39mm(D), 4mm (THK) hook

MOBILE X-RAY APRON HANGER ADAPTER



- Adapter for Mobile X-ray hook up to 58mmW x 3mm THK

CAT# : ESSH-MXHA
 Materials: : Stainless Steel 304
 Dimension : 170mm x 65mm(L) x 65mm(D), 3mm THK hook

SINGLE APRON HANGER TYPE A



- Double layer hanger suitable for all kinds of Radiation Protection Apron especially vest and skirt
- Swivelling hook allows the hanger to rotate in any direction
- Made of Stainless Steel SS304 rectangular section
- Contain no sharp edge with ends protection
- Easy to set and take off apron
- Made in Malaysia with after sale services

CAT# : ESSH-1A-SS
 Materials: : Stainless Steel 304
 Dimension : 165mm(H) x 500mm(L)

SINGLE APRON HANGER TYPE B



- Single layer hanger suitable for all kinds of Radiation Protection Apron
- Swivelling hook allows the hanger to rotate in any direction
- Made of Stainless Steel SS304 round tube
- Contain no sharp edge with ends protection
- Easy to set and take off apron
- Made in Malaysia with after sale services

CAT# : ESSH-1B-SS
 Materials: : Stainless Steel 304
 Dimension : 135mm(H) x 500mm(L)

SINGLE APRON HANGER TYPE C



- Single layer hanger suitable for all kinds of Radiation Protection Apron
- Made of Stainless Steel SS304 8mm Diameter rod
- Contain no sharp edge with upward ends
- Easy to set and take off apron
- Made in Malaysia with after sale services

CAT# : ESSH-1C-SS
 Materials: : Stainless Steel 304
 Dimension : 135mm(H) x 500mm(L)

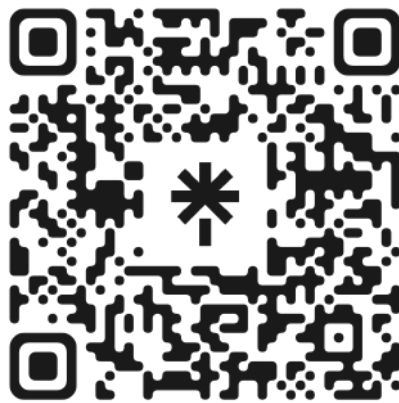
SINGLE APRON HANGER TYPE D - DOUBLE LAYER



- Double Layer hanger suitable for vest and skirt
- Swiveling hook allows the hanger to rotate in any direction
- Made of heavy duty stainless Steel SS304, 8mm diameter rod
- Contain no sharp edge with upward ends
- Easy to set and take off apron
- Made in Malaysia with after sale services

CAT# : ESSH-1D-SS
 Materials: : Stainless Steel 304
 Dimension : 245mm(H) x 540mm(L)

**SCAN ME FOR
MORE INFO**



https://linktr.ee/malray_my