**VarioShield** has developed into a total supplier of radiation-proof solutions for the nonresidential construction sector. We are proud of the growing number of projects for which we are delivering our products and the positive reactions we are receiving from our customers. We consider it important to listen carefully to our customers and to involve them in coming up with solutions for the problems surrounding radiation-proof facilities. And it is on this basis that we advise our customers and develop our products.

We now have a complete range of products with which the contractor and fitter can build any type of radiation-proof area. We have extensive experience in the fitting of rooms for PET scanners, x-ray equipment, CT scanners and isotope treatment, operating theatres, clinics and dentist's surgeries. We have projects in the Netherlands, Belgium, Germany, France, Spain, Scandinavia, Singapore and Curaçao.

In this brochure you will find all the most common products. If you require deviating dimensions, a special construction or a different type of material or sheeting, please feel free to contact us. We will be happy to discuss the possibilities with you.





## VARIOSHIELDPLUS

The smartest VarioShield panel is the variable lead lined plaster panel with overlap: a handy panel that can be mounted quickly and easily on metal stud profiles. Thanks to the overlap the horizontal seams are immediately radiation proof. This makes it possible for a fitter to mount these panels at a fast pace (up to 10 m<sup>2</sup> per hour). VarioShield<sup>Plus</sup> can be mounted by one person.

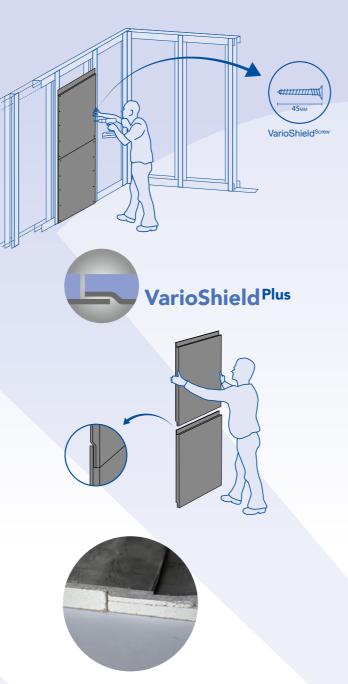
## Sizes of VarioShield<sup>Plus</sup>

Length:	1200 mm
Width:	600 mm
Lead thicknesses:	1.0 mm 1.5 mm 2.0 mm 2.5 mm
	3.0 mm

Can be used on metal stud profiles.

## The advantages of VarioShield<sup>Plus</sup>

- Easy to handle, also in confined spaces
- Simple transport (returnable pallet), also at cramped building sites
- Much less risk of damage during transport and installation
- Lower physical load (worker-friendly)
- Spacesaving
- Practically no waste
- Horizontal seams immediately radiation proof
- Tested and approved by Applus RTD



## VARIOSHIELDBASIC

The standard VarioShield radiation-proof lead lined plaster panels are of the highest quality and can be delivered quickly. Can be used on metal stud profiles.

### Sizes of VarioShield<sup>Basic</sup>

Lengths:	2400 mm and 2600 mm
Width:	600 mm
Lead thicknesses:	0.5 mm 1.0 mm 1.5 mm 2.0 i

# **OTHER SIZES AND SHEETMATERIALS**

VarioShield produces and supplies these high-quality lead lined plaster panels custom-made as well, between lead thicknesses of 0.5 mm and 3.0 mm. This allows fitters to work with easy-to-handle panels of any desired length! An additional advantage is that no waste is left over. Can be used on metal stud profiles.

#### Sizes of VarioShield

Length:	1200 mm up to 2600 mm
Width:	600 mm
Lead thicknesses:	0.5 mm 1.0 mm 1.5 mm 3

VarioShield is supplied as standard with 12.5 mm plasterboard. We can glue the radiation-proof lead layer also on other sheet materials, for example to ensure higher fire or sound resistance. Please contact us for more information.

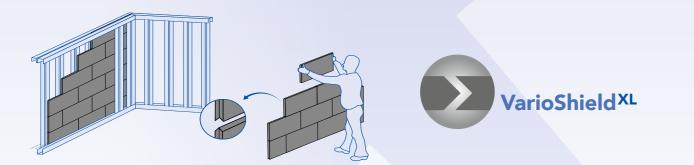


mm 2.5 mm 3.0 mm

### m 2.0 mm 2.5 mm 3.0 mm

## **VARIOSHIELD**<sup>XL</sup>

VarioShield<sup>XL</sup> is a handy lead brick for building walls that require high radiation proofing. The lead elements have an interlocking V-shaped groove on their edge, which provides a radiation-proof end result without the need of an extra lead strip between the bricks. The bricks are mounted between an inner and outer construction of reinforced metal stud profiles.



### Sizes VarioShield<sup>XL</sup>

Thicknesses	8 mm - 10 mm	12 mm - 15 mm - 20 mm
Length	600 mm	600 mm
Width	400 mm	250 mm

Please feel free to contact us for deviating lead thicknesses. We will be pleased to advise you regarding the most efficient solution.

#### The advantages of VarioShield<sup>XL</sup>

- VarioShield<sup>xL</sup> lead bricks weigh around 25 kg and can be handled within the norms of health and safety.
- System can be installed simply.
- Wiring can be concealed using the double metal stud system.
- · Speedy installation, thereby saving time and money.
- Better alternative for masonry containing baryte.
- VarioShield<sup>XL</sup> has been tested and approved by Applus RTD.

## VARIOSHIELDDOOR

In order to make door openings radiation proof, VarioShield supplies a complete door system with integrated lead sheets and strips. The system is available with lead thicknesses of 1 to 6 mm (thicker lead packs can be produced upon request). Together with the reinforced hinges (4 per door), this ensures a very stable door construction.

#### Door

- Solid hardwood, fitted in the factory with two internal laminated lead sheets.
- Finish: primed or laminated as desired.
- Sizes: height to 2400 mm, width 630 to1830 mm, thickness 40 mm.

#### Frame

- Material: solid hardwood
- Frame sizes: 80 x 70 mm or 100 x 70 mm (other thicknesses upon request sizes including lead)
- · Fitted in the factory with rabbets and groves.

### Fittings

- 4 reinforced hinges of 160 mm x 80 mm
- · Heavier doors can be fitted with bearing balls.
- Doors and frames can be fitted with prefab pin hole

### Lead thicknesses

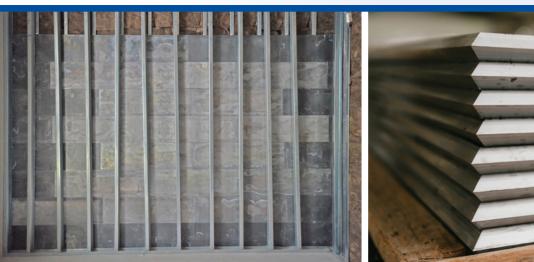
1 mm 2 mm 2,5 mm 3 mm 4 mm 5 mm 6 mm Thicker lead packs: supplied upon request.

#### Viewing window with lead glass (optional, upon request)

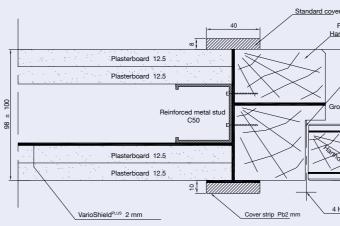
- Rectangular sizes:
- Round sizes:
- diameter 300 and 400 mm

## **Noise resistance**

• 31 dB (Ra)







300 x 400 mm to 500 x 800 mm (depending on door dimensions)

r strip rame Pb2 mm <u>dwood 100 x 70</u> <u>Babbet 45 x 15</u> unded door (laminated option)	
Pb2 mm	-0

## VARIOSHIELDFRAME

Radiation-proof windows provide protection for the staff operating equipment that produce hazardous radiation, such as x-ray equipment. For this, VarioShield supplies glass with a lead equivalence as of 2 mm and wooden frames with protective lead strips in any desired lead thickness.

## Glass

Lead equivalence: 2 mm (higher values: upon request)		
Height:	500 mm to 1400 mm	
Width:	to 2400 mm without mullion	
Glass thickness:	7 to 8 mm	

## Frame

Material: solid hardwood 100 x 70 mm for metal stud, 80 x 70 mm for masonry. Frame sizes: Other frame sizes upon request. Screwed hardwood framework.

## Option

Lead glass is also available separately.

## VARIOSHIELDFRAME ALUMINIUM

Radiation-proof windows are also available in radiation-proof aluminium frames. As in the case of the wooden variant, this window frame is available with lead equivalence as of 2 mm. A simple click system makes for easy assembly ..

## Glass

Lead equivalence: Height: Width: Glass thickness:

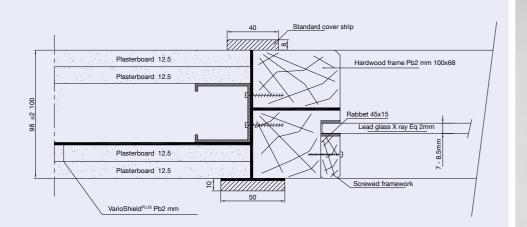
2 mm (higher values: upon request) 500 mm to 1100 mm to 2100 mm without mullion 7 to 8 mm

## Frame

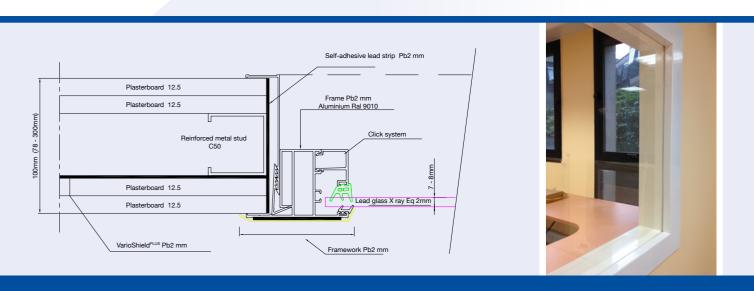
Material: possible upon request) Assembly method: Click system Suitable for wall thicknesses of 78 to 250 mm

## Option

Lead glass is also available separately.







## extruded aluminium, as standard with a lacquer finish of RAL 9010 (other colours

# SELF-ADHESIVE LEAD STRIP

For sealing seams between lead lined plaster panels, at joints in frames and other potential areas of radiation leaks, VarioShield supplies rolled lead with self-adhesive strip.

 Thickness:
 0.5 mm 1 mm 1.5 mm 2 mm 2.5 mm 3 mm

 Width:
 50 mm

The lead thickness should always be (at least) the same as the thickness of the lead sheet on the lead lined plaster panels of VarioShield.

# CORNERSHIELD

CornerShield is the self-adhesive corner solution in a roll. The strips are pre-processed in such a way that they can be easily bent into shape and so they are ideal for easily providing corners with a radiation-proof finish. Width: 100 mm Lead thicknesses: 0.5 mm 1.0 mm 1.5 mm 2.0 mm 2.5 mm 3.0 mm

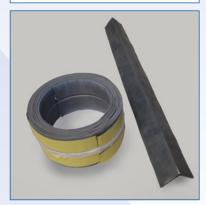
# WALL SOCKET CASING

For making wall sockets in lead lined plaster panels radiation proof. Simple to combine in all common metal stud systems. Fitted with one or two openings for connections. Deviating solutions can be ordered upon request. Standard lead thickness: 3 mm

# CASING FOR WATER PIPES, DRAIN PIPES AND SUPPORT ARMS

To ensure water pipes, drains, drainpipes and supporting arms of devices are radiation proof, VarioShield supplies solutions in all forms and sizes. We will provide you with customised advice for the best solution.











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