BqSv

RadSafe

lead-free

RECYCLE

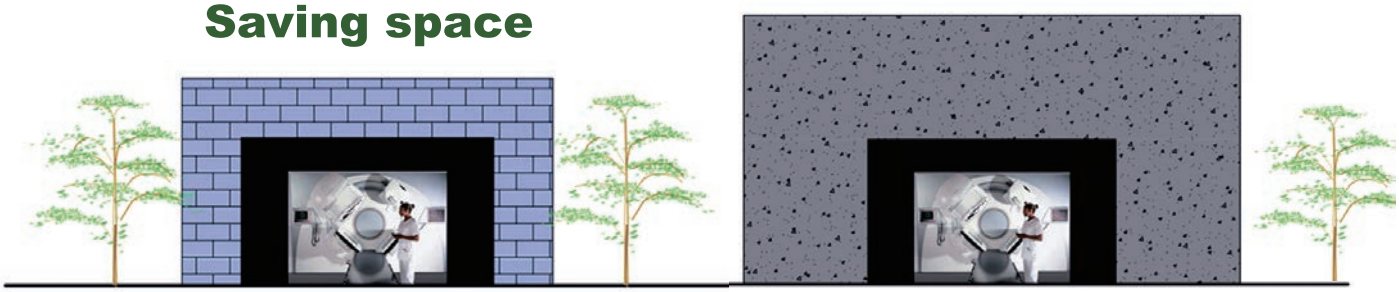
REDUCE REUSE

FIREPROOF

0 0 0 0

Radiation Shielding System

Saving space



BK10 bunker

Concrete bunker

For more than 100 years, lead Pb-207 has been the radiation shielding material of choice at medical facilities and research laboratories. This wide spread use comes with a health threatening cost. Lead is toxic to humans. In response to this health and environmental threat, BQSV has developed a revolutionary radiation shielding product, which material is from natural mineral with non-toxic and harmless to our environment named **Beck Board** and **Beck Brick**.

Beck Board (BD01)

BD01 is designed for medical X-ray shielding from energy 60 to 200 kVp. It is various application for wall and ceiling shielding of imaging exam room, and also perfect for the door shielding, the movable barrier shielding, and working partition shielding.



Shielding performance of BD01 VS Lead at various X-ray energy and Isotopes.

Lead Eq. (mm)	70 kVp	100 kVp	120 kVp	150 kVp	Cs-137	Co-60	F-18	I-131
BD01 (Th:7mm)	≧1.0(1)	≧0.8(1)(2)	≧0.6(1)(2)	≧0.5(1)(2)	≧0.8	≧1.2	≧0.8	≧0.9

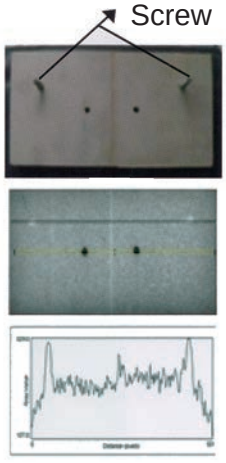
Note：(1) Tested by TUV NORD Ensys GmbH & Co,KG
(2) Tested by Tokyo Industrial Technology Research Institute

BD01 Specification

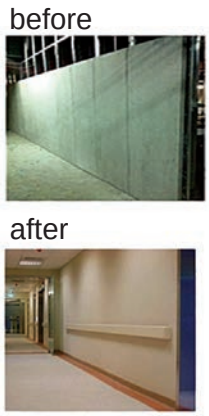
Model No	Lead equivalent	Size (cm)	Hazard level
BD01	≧1 mm (70 kVp X-ray)	W122×H244	
Density	Weight	Thickness	
>2.2 g/cm^3	≃ 40 kg / 88 lb	7±0.3 mm	

Barite Glue fills in the gap

No need to compensate for screw penetration

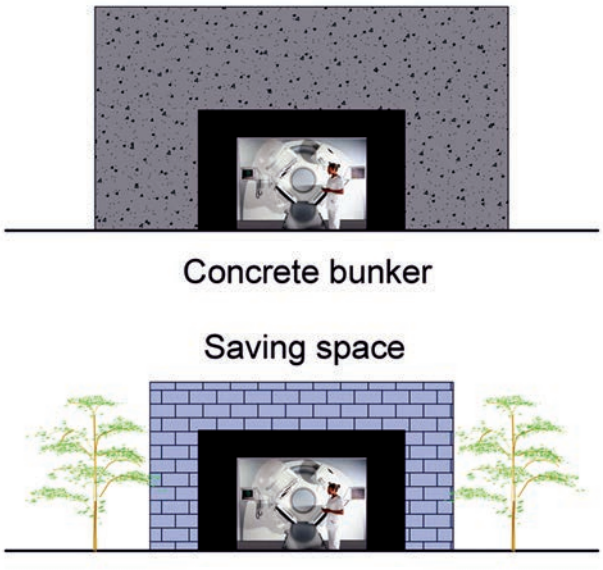


Installs just like dry wall



Beck Brick (BK10)

Beck Brick is designed for radiation shielding of high energy radiation and high activity photons, gamma rays, and electron beams within medical and industrial facilities. It is ideal shielding for linear accelerators radiation bunkers, proton therapy vaults, and I-131 therapy wards. BK10 minimizes the space requirements and reduces cost for non-toxic shielding to substitute the lead and concrete.



BK10 bunker

Shielding performance of BK10 VS Lead at various isotopes and electron beams .

Model No	Isotope	Cs-137	Co-60	F-18	I-131	6 MeV	10 MeV
BK10 (Th:10 cm)	TVL	12 cm	18 cm	9 cm	6 cm	21 cm	23 cm
	Lead Equivalent	1.8 cm	2.5 cm	1.9 cm	2 cm	2.3 cm	2.1 cm

BK10 Specification

Model No	Size	Weight	Density
BK10	L18x H10 x D10 cm	5.6 to 5.9 kg	3.1 to 3.3 g/cm^3

V lock design to stop radioation leakage

easy installation

Saving Space
Easy installation
Fast Construction
Reusable

BgSV®

Feature and advantage

Radiation protection	BD 01 and BK 10 content high purity Barium which provides the excellent radiation shielding performance.
Non- toxic	Barium Sulfate is not toxic and can't be metabolized to human. It is not only used as contrast agent in GI exams, but also BSB and BK for radiation shielding.
Fire-proof	BSB is aggregated with wood fiber, cement and Barium Sulfate forms a fire resistant construction, which has passed nonflammable testing and also awarded the fire wall proof certification from Taiwan and Japan authority.
Easy installation	The BSB installation is simple as dry wall installation, it no needs the additional shielding compensation for nailing or screwing. The gap is filled by Barite Silicon to resist radiation leakage and prevent the crack from impact.
Cost effective	The total cost from material to installation is lower than the traditional lead shielding wall. It also saves time for installation to create more cost effective.
Green	The material is from natural barium mine and the production procedure is low energy consumption and reduce CO2 emission for saving our planet.

Patent


Patent of Japan

Patent of Germany


Patent of China


Patent of Taiwan


CE Certificate

Customized lead glass

Size	20 x 20 to 200 x200 cm^2
Thickness	0.8 to 10 cm
Density	4.2 to 5.6 g/cm^3
Lead equivalent	2 to 50 mm

BqSv®

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