

bariblock®

Protects against radiation

Patent registered by

[sva] società
valorizzazione
ambientale

ABOUT US



SVA S.r.l., with more than 10 years of experience in the field of radiation protection, helps to **protect** people's **health**, protecting them from radiation thanks to efficient and low environmental impact construction solutions.

In compliance with current radiation protection regulations, SVA designs and manufactures **screens against ionising radiation** using high-density **eco-sustainable materials** such as barytic concrete, used to make **Bariblock**.

OUR TEAM



Franco Daniel

Founder and A.D.

With over 35 years of experience in the mixed steel-concrete sector, driven by a vision to industrialise the construction world, in 2007 he founded SVA S.r.l. The aim is to offer products for eco-sustainable and economic radioprotection: it is BARIBLOCK®.



Danilo Cotton

Nuclear Engineer

He graduated from the University of Palermo in Energy and Nuclear Engineering with a thesis on dosimetric characterization of radioactive sources. After an initial scientific research activity, he decided to put his high skills at the disposal of the development of the BARIBLOCK® product.



Alessio Argentoni

Research and Development

After graduating from the University of Padua in Civil Engineering with an experimental thesis on mixed steel-concrete structures, she specialised in the areas of "quality" and "green building", actively contributing to SVA's research and development sector.

THE BARIBLOCK PRODUCT



ECOSUSTAINABLE

Unlike lead or other foundry derivatives, **barite** inert, the main component of BARIBLOCK®, is **natural, easy to store, easy to dispose of and does not pollute.**

ECONOMIC

Compared to lead panels, with the same shielding effect, it has **considerably lower costs.**

REDUCED OVERALL DIMENSIONS

Compared to traditional concrete, with the same shielding effect, it has **lower overall thicknesses.**

THE BARIBLOCK PRODUCT



TECHNICAL SUPPORT

We put at your service, a **Qualified Radiation Protection Expert**, to assess the best design solution in accordance with current regulations in terms of radiation protection.

OPERATING

Among the services offered, you can use the installation of **BARIBLOCK®** products. An operation **carried out in a workmanlike manner by our experts**, without the risk of draughts or non-continuous shielding.

CUSTOMER ASSISTANCE

When the work is completed, **we check the correct shielding** of the radiogenic sources, intervening promptly in case of anomalies. Safety is in first place.

BARIBLOCK® VS. PIOMBO

**BARIBLOCK® IS 2÷3 TIMES
CHEAPER THAN LEAD
SHEETS**

BARIBLOCK® VS. PIOMBO

**BARITE, O BARIO
SULPHATE (BaSO₄), IS A
NATURAL AND
ECOSUSTAINABLE
MINERAL**

SCIENTIFIC EVIDENCE

It is also difficult to dispose of lead as it is classified as hazardous waste unlike barium sulphate (BaSO_4).

EEC/91/689 of 12 December 1991.

SCIENTIFIC EVIDENCE

"Exposure to lead can be both occupational and environmental" [...] **"Once absorbed by our body, lead can accumulate and persist for very long periods of time, up to over 30 years".**

THE ISS - HEALTH INSTITUTE regarding exposure to lead.

SCIENTIFIC EVIDENCE

"Inorganic lead is classified in group 2A (probable human carcinogens), i.e., among those substances that are likely to cause cancer in humans".

IARC - International Agency for Research on Cancer ISS regarding the classification of lead.

SCIENTIFIC EVIDENCE

"Lead poisoning is also called saturnism and in the most serious cases can cause paralysis, with the possibility of death.

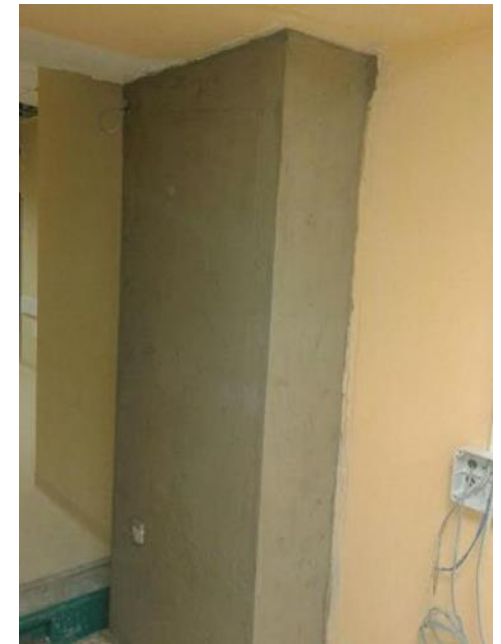
THE ISS - HEALTH INSTITUTE regarding lead poisoning.

SCIENTIFIC EVIDENCE

"Due to its low solubility in water, barium sulphate (BaSO_4) is considered non-toxic.

IFA - Institute for Occupational Safety and Health of the German Social Accident Insurance.

HEALTHCARE APPLICATIONS



To shield the primary beam of two 15 *MeV/cad.* accelerators in the radiotherapy department of **Marrelli Hospital**, barytic blocks type Bariblock®15 were used.

APPLICATIONS FOR INDUSTRY



SVA S.r.l supplies prefabricated barytic concrete bunkers for non-destructive testing. The photo shows a [barytic concrete door](#) with integrated electromechanical movement system made for **Metalprove S.r.l.**

APPLICATIONS FOR RESEARCH



Irradiation duct, consisting of removable walls and fully interlocking covers, for the experimental nuclear reactor of the **L.E.N.A. in Pavia**.

ABOUT US

**"Fencing two 15 MeV
accelerators
was simple and
economic with
BARIBLOCK®".**

Ing. *Francesco Provenzano*, about the shielding
made with barytic blocks BARIBLOCK® *Marelli*
Hospital of Crotona

ABOUT US

"Thanks to the reduced dimensions compared to ordinary concrete, it was possible to create a shielding that would not get in the way of the adjacent shielding structures".

Dr. *Massimiliano Clemenza* of the University of Milan Bicocca, about the radiation channel built at the **L.E.N.A.** of Pavia



**DO YOU HAVE A PROJECT THAT
REQUIRES RADIATION
PROTECTION?
CONTACT US NOW**

Danilo Cotton
Nuclear Engineer

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