

VeriShield® Industrial Shielding

HIGH DENSITY MODULAR SHIELDING SOLUTIONS



Radiation can be a serious concern with industrial or medical x-ray systems, radioisotope production, particle accelerators, nuclear power facilities and other non-medical applications. To provide a safe workplace environment Veritas manufactures a range of modular shielding and radiation-protective door systems suitable for industrial applications.

Designed to meet job-specific requirements Veritas shielding solutions are suitable for use in:

- Nuclear Medicine
- High Energy X-ray Systems
- Fission/Fusion Research
- Energy Production

Veritas VeriShield® are individual modules stacked to create the required radiation attenuating environment. The modules feature a sine-wave-shaped design that presents a full 100% inter-locking edge, and shielding attenuation performance is backed by a 100% guarantee.

Manufactured in a controlled environment VeriShield provides both photon and neutron attenuation, and the constructed system retains the ability to be disassembled and reused.

Features

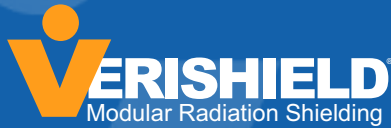
- Modular
- Multiple high density options
- Sine-wave shape design
- Removable
- Factory-controlled manufacturing
- Custom designs available
 - Based on size and shielding req.
- Dry stacked construction

Benefits

- 100% shielding guarantee
- Faster construction
- Perfect for difficult locations
 - Existing buildings
 - Around equipment
 - On ships
- Unaffected by weather
- Quiet, fast, dependable doors



Veritas VeriShield modular shielding systems guarantee 100% radiation protection.



Veritas VeriShield is a system of dry stacked modules that can be easily configured into any size, shape or type of radiation shielded structure. Individual shielding requirements are met by tailoring the density and number of layers of VeriShield as needed. Shielding is easily installed, in even the most confined work site, and can be easily increased, reconfigured or removed.

Compared to concrete, VeriShield requires substantially less space and is installed much faster. Modules are easily transported to the worksite and can be stored indoors or out, as installation is unaffected by weather. Their compact size allows for convenient delivery with fast and easy installation without disrupting surrounding services.

VeriShield provides superior neutron and photon attenuation for all types and energies of industrial equipment. No other shielding method provides a comparable blend of attenuation, convenience and affordability.



FRACTIONAL MODULES

In addition to standard full-sized modules, VeriShield is available in half thicknesses (HT), which allow layers to be offset, effectively interlocking the overall shielding structure firmly together.

COMPRESSIVE STRENGTH

Guaranteed to meet 6,600 psi. Product routinely surpasses this minimum and is typically on the order of 7,000 psi and above (depending upon mix).

Grout materials will have a lesser compressive strength, but shall not be less than 6,000 psi when mixed on site.



SIZE

Standard VeriShield modules are 5" x 5" x 10" (127mm x 127mm x 254mm).

Their compact size allows for easier handling with increased worker safety, and a dramatic reduction in installation times.

DENSITY

VeriShield is available in densities ranging from 150 lbs/ft³ (2.4 g/cm³), to 313 lbs/ft³ (5.0 g/cm³).

INTERLOCKING RIDGES

Smoothly curved faces provide a tight fit between individual modules, for a solid, leak-free interlock.

By eliminating any chance of straight line passage of radiation between modules, VeriShield provides enhanced attenuation, by a factor of two times at the joints, unmatched by other shielding methods.

Veritas SmartDoor technology leads the way in superior engineering and operation.



“The original design plan was for a poured-in-place concrete vault, which would have been logistically difficult and very expensive.

However, with design input and collaboration from Veritas, our team was able to design a VeriShield® block vault, which allowed for less shell demolition, a quicker schedule, and a smaller overall vault footprint.

The professionalism and collaboration from Veritas were critical to the success of this project.”

*—Jim Kerr,
Contract Manager, IMC Construction*



veritas
SmartDoor®
Shielded Entry Systems

Veritas SmartDoors® feature a streamlined design, which gives you optimal space, and the energy-efficient drive system is quiet, fast and ultra-reliable. Integral VeriShield® Modules provide 100% guaranteed radiation shielding, and standard designer finishes and optional custom surfaces add beauty to the mechanical brawn of the system.

Doors to be seen, not heard.

Smooth linear movement and Whisper Technology™ provides quiet operation.

We're testing to failure and are still waiting - No failures in over 12 years of typical operation, and still counting.

The use of robust high capacity components provide the system with a 4x safety factor, which ensures performance that lasts. High maintenance components such as wear strips, rollers and multiple support rails have been eliminated.

Rapid-Open technology speeds access.

6-8 second open/close speeds eliminate the need for partial-opening switches and unproductive wait times. The electronic drive system is infinitely adjustable and can be modified to suit facility preferences. Personnel safety is ensured with the use of industry's foremost electronic safety system and emergency mechanical backup.

Interactive computer control with peripheral connectivity.

Upgraded HMI electronics provide precise door operation with comprehensive data collection/reporting and remote troubleshooting capabilities. The system is easily connected to optional security card readers, fingerprint scanners and voice actuated components.

Eliminate the inconvenience of process interruptions.

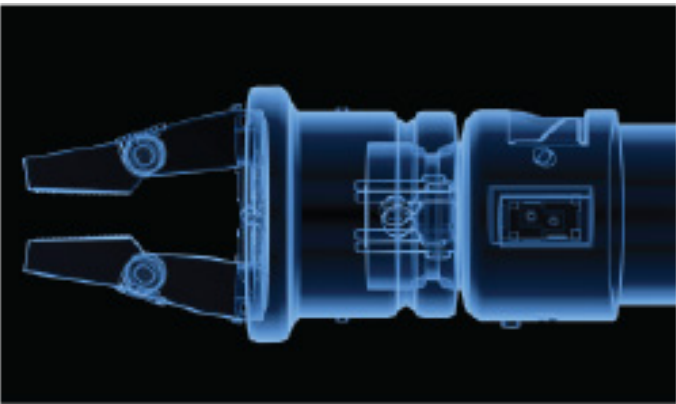
Redesigned and upgraded mechanics minimize wear-related parts, simplify maintenance and increase protection of the unique linear drive. The new design allows for faster installation and a reduced height profile, perfect for limited height spaces.

All Veritas Providence® doors come with a 2 year warranty.

Redundant safety systems.

Ensure optimum personal protection with included emergency sensors, emergency stop controls, and effortless manual hand crank for operation during power outage.

Shielding solutions for a wide range of industrial applications.



Commercial Radionuclide Producers and Research Institutions

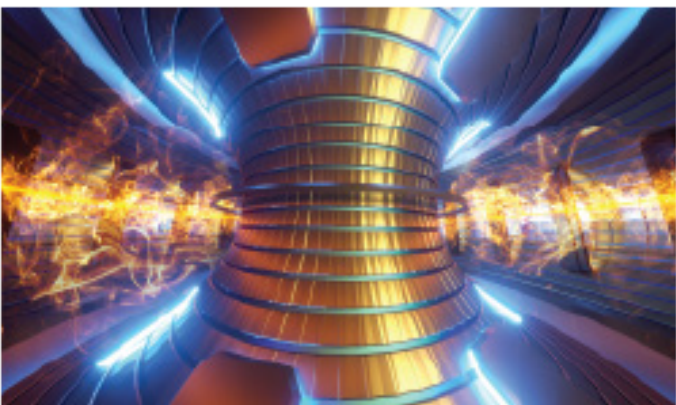
Accelerator and cyclotron-produced diagnostic and therapeutic radiopharmaceuticals to meet critical patient healthcare needs and help advance clinical research.

Veritas shielded rooms, door systems, structures and peripheral shielding.

High Energy X-Ray Systems

Non-destructive testing of critical parts such as those in aerospace, medical device, electronic, automotive and defense applications. Also cargo inspection and product screening facilities.

Veritas shielded rooms, door systems and peripheral shielding.



Fission / Fusion Energy Generation and Research

Production of reliable nuclear power through advanced technologies. Development of innovative bioshield designs and components to retain strength and attenuation levels under neutron loads and high temperatures. Veritas designs maximize shielding attenuation while assisting with activation/waste/recyclability issues associated with nuclear facilities.

Veritas exterior vessel shielding, storage bunkers and bioshield stockpiles.



Small Modular Reactors (SMR)

Veritas is actively exploring VeriShield options for incorporation in modular shielding designs as part of the IAEA Nuclear Harmonization and Standardization Initiative (NHSI), with the goal of facilitating the safe and secure deployment of SMRs and other advanced nuclear technologies.

For more information on Veritas Industrial Solutions
or how Veritas can benefit your next project,
contact us at 888-242-6760 or visit veritas-medicalsolutions.com

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Medical Solutions