

VeriShield® HT

MODULAR RADIATION SHIELDING



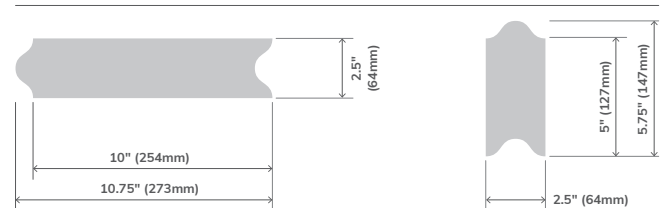
Groundbreaking system of dry stacked shielding modules which interlock to form a tight, leak-free therapy room of any size or shape. Unique sine-wave shapes eliminate straight line seams and provides superior neutron, photon and particle attenuation at the joints. VeriShield construction requires half the space of mass concrete vaults.

VeriShield radiation shielding components are individual modules combined together to form a composite structure to create the required radiation attenuating environment. The constructed system retains the ability to be deconstructed and reused.

VeriShield products are manufactured in a controlled environment and incorporate high Z aggregates (for photon attenuation) as well as neutron additive materials.

The VeriShield photon, neutron and electron shielding modules feature a design that presents a full 100% inter-locking edge. Lapping or alternating of the seams results in the prevention of straight line paths for radiation streaming. Modules interlock together to form a solid and stable structure.

V250HT



The VeriShield V250HT block is designed to allow the full thickness VeriShield V250 blocks to be offset 2-1/2" (64mm), which allows the sine-wave shapes to interlock. This results in additional structural strength of the stacked blocks.

Compressive strength is guaranteed to meet 2,800 psi. This product routinely easily surpasses this minimum and is typically on the order of 5,200 psi.

Standard VeriShield HT blocks are 2 1/2" x 5" x 10" (64 x 127 x 254mm).

Veritas VeriShield® HT

VeriShield HT Shielding Modules are manufactured and packaged in a controlled environment and incorporate high Z aggregates (for photon attenuation) as well as neutron additive materials.

| | V150HT | V220HT | V250HT |
|-----------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| SIZE | 2 1/2" x 5" x 10" – 64 x 127 x 254mm | 2 1/2" x 5" x 10" – 64 x 127 x 254mm | 2 1/2" x 5" x 10" – 64 x 127 x 254mm |
| WEIGHT PER MODULE | 10.75 lbs. - 4.88kg | 15.75 lbs. - 7.1 kg | 18 lbs - 8.2 kg |
| *DENSITY | 2.4 g/cu.cm (median) | 3.5 g/cu.cm (median) | 4 g/cu. cm (median) |
| COMPRESSIVE STRENGTH | 3,000 psi - 211 kgf/cm ² | >4,800 psi - 337 kgf/cm ² | >5,200 psi - 366 kgf/cm ² |
| SOLUBILITY | Insoluble | Insoluble | Insoluble |
| REACTIVITY | Non-Reactive | Non-Reactive | Non-Reactive |
| MELTING POINT | ^2,800°F - 1,538°C | ^2,800°F - 1,538°C | ^2,800°F - 1,538°C |
| BOILING POINT | N/A | N/A | N/A |

*Density variances may vary by ±8% due to standard manufacturing tolerances. VeriShield® modular blocks are engineered to meet or exceed industry standards, ensuring 100% radiation shielding effectiveness.

COMPOSITION INFORMATION

Major Compounds

| Chemical Name | CAS Registry Number |
|----------------------------------|---------------------|
| Portland Cement | *65997-15-1 |
| Gypsum (calcium sulfate) | 13397-24-5 |
| * May contain crystalline silica | 14808-60-7 |

PHYSICAL/CHEMICAL CHARACTERISTICS

| | |
|------------------------|---------------|
| Boiling Point | N/A |
| Vapor Pressure (mm Hg) | N/A |
| Melting Point | N/A |
| Vapor Density (AIR-1) | N/A |
| Evaporation Rate | N/A |
| Solubility in Water | N/A |
| Appearance & Odor | Grey; no odor |

REACTIVITY DATA

| | |
|------------|--------|
| Stability: | Stable |
|------------|--------|

RADIATION ATTENUATION

Attenuation is based on interpolated data for some energies. The listed TVL's represent the average tenth value thickness after 5 decades of attenuation. First TVT and equilibrium TVL's may be available for thin barrier sections.

Veritas will provide calculations with appropriate safety factors to ensure attenuation requirements are met.

Please refer to individual VeriShield data sheets for specific radiation attenuation figures.

