

VeriShield® Grout

FOR USE WITH VERISHIELD MODULAR SHIELDING

VeriShield Grout is a dry mixture of aggregates, formulated in densities compatible with Veritas VeriShield V150, V220, V250 and V300 shielding modules, typically used for infill of structural bond beams and bearing plates in VeriShield radiation shielding installations.

Designed to be mixed with Portland cement, VeriShield Grout will remain volume stable in both wet and dry conditions, and will not crack or delaminate from compressive loading, impact, lateral thrust, high heat or continuous vibration. VeriShield Grout will provide radiation attenuation and physical properties similar to its corresponding VeriShield module density.



COMPRESSIVE STRENGTH	5,200 psi - 366 kgf/cm ²
DENSITY V150	150 lbs/cu ft – 2.4 g/cu. cm (median)
DENSITY V220	220 lbs/cu ft – 3.5 g/cu. cm (median)
DENSITY V250	250 lbs/cu ft – 4 g/cu. cm (median)
DENSITY V300	313 lbs/cu ft – 5 g/cu. cm (median)
SOLUBILITY	Insoluble
REACTIVITY	Non-Reactive
ABSORPTION	3.3%
MELTING POINT	^2,800°F - 1,538°C
BOILING POINT	N/A
COLOR	Grey

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. Contact Veritas for more information.

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

	V150 ATTENUATION - PRIMARY BARRIER (1TVL=)	V150 ATTENUATION - SECONDARY BARRIER (1TVL=)	V220 ATTENUATION- PRIMARY BARRIER (1TVL=)	V220 ATTENUATION - SECONDARY BARRIER (1TVL=)	V250 ATTENUATION - PRIMARY BARRIER (1TVL=)	V250 ATTENUATION - SECONDARY BARRIER (1TVL=)
6MV:	13.5" - 34.3CM	11" - 28.0CM	9.0" - 22.9 CM	7.4" - 18.8 CM	8" - 20.3CM	6.5" - 16.5CM
10MV:	15.3" - 38.8CM	12" - 30.4CM	10.2" - 25.9 CM	8.0" - 20.3 CM	9" - 23.0CM	7.7" - 19.6CM
15MV:	17.0" - 43.2CM	13" - 33.0CM	11.4" - 29.0 CM	8.7" - 22.1 CM	10" - 25.4CM	8" - 20.3CM
18MV:	17.5" - 44.4CM	13" - 33.0CM	11.7" - 29.7 CM	8.7" - 22.1 CM	10.5" - 26.7CM	8.2" - 20.8CM