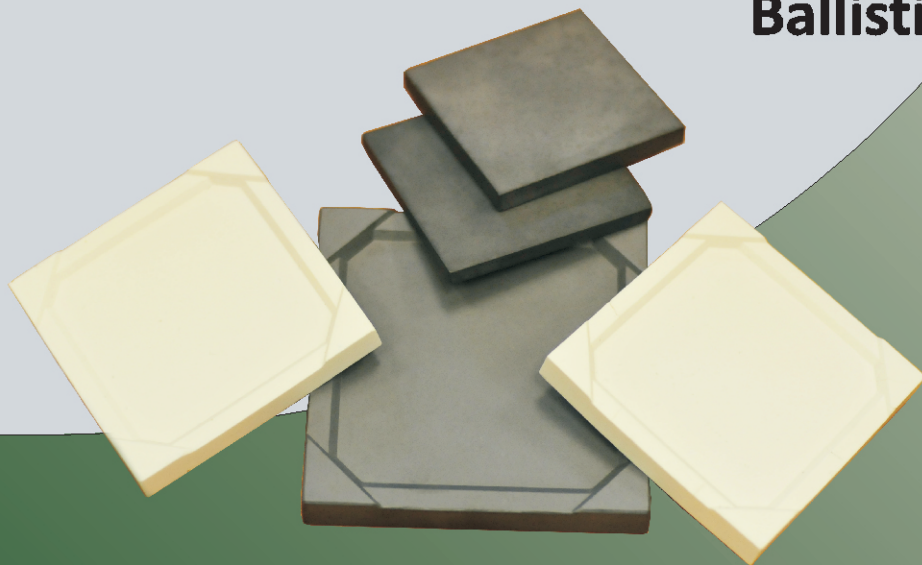




Virial[®]
Virial, Ltd

Armor ceramics



Ballistic protection plates for

- ground vehicles
- marine vessels
- aircraft
- personnel

Protection class up to 6a
(GOST standard)

- Dimensions of the plates

Length	Width	Thickness
50 - 200	50 - 200	5 - 50

Custom designs available

- Physical and mechanical parameters of armor ceramics

Material	Density, g/cm ³	Young modulus, GPa	Bending strength, MPa	HV hardness, GPa
Reaction – bonded SiC	3.05 - 3.10	340 - 400	330 - 420	23 - 29
Solid-state sintered SiC	3.11 - 3.16	350 - 400	350 - 400	25 - 29
B ₄ C –based ceramics	2.80 - 2.85	400 - 460	350 - 450	32 - 36
TiB ₂ –based ceramics	3.31 - 3.39	450 - 500	500 - 600	30 - 36
Al ₂ O ₃ –based ceramics	4.04 - 4.05	380 - 410	400 - 500	19 - 21

Customized plate material and design development based on customer specifications are also available