



Boron Carbide Bulletproof Plate

Boron carbide is an ideal material for making the bulletproof plate. Nextgen Advanced Materials supplies Boron Carbide Bulletproof Plates with high quality and fast delivery. The customization is also available.

Product Description

Find a huge selection of Boron Carbide Bulletproof Plate from US at Nextgen Advanced Materials INC. Boron carbide is an extremely hard boron-carbon ceramic. Boron carbide has a Mohs hardness of about 9.49, which is the third-highest hardness material after diamond and cubic boron nitride. As of 2015, boron carbide is the third hardest substance known, after diamond and cubic boron nitride, earning it the nickname “black diamond”. Boron carbide is used as a bulletproof plate.



Boron Carbide Bulletproof Plate Specification

Item	Parameter
Compound Formula	B ₄ C
Molecular Weight	55.26
Appearance	Black
Melting Point	2445°C
Density	2.1 to 2.7 g/cm ³
Electrical Resistivity	0 to 11 10 ^x Ω-m
Poisson's Ratio	0.17-0.18



Specific Heat	950 J/kg-K
Tensile Strength	350 MPa (Ultimate)
Thermal Conductivity	31 to 90 W/m-K
Thermal Expansion	4.5 to 5.6 $\mu\text{m}/\text{m-K}$