



STS Rubber Panel Specifications: Styrene Butadiene Rubber (SBR)

ASTM D1418 ISO 1629 Designation:
SBR ASTM D2000, SAE J200 Type/Class: AA, BA

STS provides ballistic rubber products for use in military applications, law enforcement training facilities, and private ranges. Our rubber is made in USA, with top quality properties as indicated in the specifications listed below.

These properties translate into top qualities of strength, elasticity, and durability of all our rubber products. Our ballistic rubber blocks, panels, and sheets can sustain thousands of high velocity rounds while maintaining the structural integrity of our product. Our rubber products are designed to provide a safe live fire environment by controlling bullets on contact, stopping, or preventing ricochets with self-healing property after impact.

Ballistic Rubber vs. Natural Rubber

Advantages: Similar properties to NR but with improved aging and temperature resistance; good dynamic, mechanical and fatigue properties; high strength, resilience, and abrasion properties; good resistance to many inorganic chemicals.

Added Traits: higher tear strength, UV and weather protection, high range of temperature resistance.

Physical properties:

Durometer or Hardness Range: 50-70 Shore A	Tensile Strength Range: 950-1150 PSI
Elongation (Range%): Excellent	Abrasion Resistance: Excellent
Adhesion to Metal: Fair	Adhesion to Rigid Materials: Fair (Variable textures)
Flex Cracking Resistance: Excellent	Impact Resistance: Excellent
Resilience/Rebound: Excellent	Tear Resistance: Excellent
Vibration Dampening: Good	General Temperature Range: -60°F to 400°F
Max. for Continuous Use (Static): 380°F	

Environmental Performance:

Flame Resistance: Good	Odor: Good
Radiation Resistance: Fair to Good	Steam Resistance: Good
Weather Resistance: Excellent	Water Resistance: Excellent

Compound:

Tensile strength: 950-1150 psi, Ultimate elongation: 210-300%, 100% modulus: 350-400psi. coefficient of friction: 1.2-1.25 static. UV exposure, ATSM D 925-88(00) 72 has ten inches below 275W RS UV bulb: tensile strength 5.9 % change, elongation 6.7% change.