WS Hampshire Inc.
Over 100 Years of Non-Metallic Material Fabrication

IAPD MEMBER

RYERTEX PHENOLIC LAMINATES

Ryertex Laminates are made by applying heat and pressure to layers of paper, canvas, or linen with phenolic thermosetting resins. When heat and pressure are applied to the layers, a chemical reaction (polymerization) transforms the separate layers into a single laminated material with a "set" shape that cannot be softened again -- therefore, these materials are called "Thermosets". A variety of resin types and cloth materials can be used to manufacture Ryertex laminates with a range of mechanical, thermal, and electrical properties.

Physical strength, resiliency, ease and versatility of fabrication, and excellent electrical properties make Ryertex Phenolic Laminates useful as support components in a wide range of mechanical and electrical applications. Ryertex is strong, stiff, and with high impact and compressive strengths. . "FR" grades are flame retardant.

Ryertex is an industry wide, popular thermoset plastic that holds its strength throughtout its 248F operating range. It will not soften with heat and thermal expansion is minimal. Ryertex combines the tensile strength of nylon with unbeatable compressive strength, excellent wear characteristics, abraision resistance with low coefficient of friction.

TYPICAL PROPERTIES of RYERTEX LAMINATES (SHEET FORM)

(mechanical properties of rod and tube forms may differ)

GRADE	Typical Applications		Advantages
	Mechaincal	Electrical	
C	X		Basic Ryertex. Medium canvas fabric impregnated with phenolic resin. For mechanical applications requiring strength and impact resistance.
CG (graphite)	X		Graphite additive helps lubricate especially helpful when oil or grease rather than water is the lubricant.
CE		X	For electrical applications. Class A insulation. Made of a medium weave, bleached cotton fabric offering low water absorption.
CW	X		Provides better heat dissipation with copper screens interleaved amoung the canvas layers every 1/8" of thickness.
L	X		Fine weave cotton phenolic offering improved machining properties with smooth surfaces and excellent finished appearances.
LE		X	Fine weave used for electrical applications. Class A electrical insulation.
SBE-50	X		Coarse, heavy duty cotton fabric for demanding applications requiring high impact, severe environment, or rugged usage. Typical bearing material.

OTHER SPECIALTY GRADES AVAILABLE UPON REQUEST.

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets.

All values at 73°F (23°C) unless otherwise noted.