



TECHNICAL BULLETIN

General. Manufactured of Rigid Polyvinyl Chloride. Rigid Polyvinyl Chloride is the most widely used polymer in today's construction market. Versatility, cost effectiveness and an excellent record of use mean RPVC remains the most important polymer for the construction sector. RPVC is used in a variety of outdoor applications, including windows and doors, cladding and fascia boards, and fencing.

Environmental. Not only can PVC be recycled and reused, but its material properties remain intact through several phases.

Typical properties of Rigid Polyvinyl Chloride

ASTM test	Property	Rigid
PHYSICAL		
D792	Specific gravity	1.30-1.58
D792	Specific volume (in. ³ /lb.)	20.5-19.1
D570	Water absorption, 24 hours, 1/8 inch thick (%)	0.04-0.4
MECHANICAL		
D638	Tensile strength (psi)	6,000-8,000
D638	Elongation (%)	50-150
D638	Tensile modulus (10~5 psi)	3.5-10
D790	Flexural modulus (10~5 psi)	3-8
D256	Impact strength, izod (ft-lb/in. of notch)	0.4-20.0
D785	Hardness, Shore	65-85D
THERMAL		
C177	Thermal conductivity (10~4 cal-cm/sec-cm~2-°C)	3.5-5.0
D696	Coefficient of thermal expansion (10~5 in./in.-°F)	1.2-5.6
D648	Deflection temperature (°F)	
	At 264 psi	140-170
	At 66 psi	135-180
ELECTRICAL		
D149	Dielectric strength (V/mil) short time, 1/8-in. thick	350-500
D150	Dielectric constant At 1kHz	3.0-3.8
D150	Dissipation factor At 1kHz	0.009-0.017
D257	Volume resistivity (ohm-cm) At 73°F, 50% RH	>10~16
D495	Arc resistance(s)	60-80