

HDPE ColorCore



Multi-Color Engravable Polymer Sheet

ColorCore is a versatile multi-color engravable high-density polyethylene sheet with multiple layers of contrasting colors. It is a superior homogenous sheet, a product of a unique state-of-the-art continuous process called Polyfusion and manufactured to the highest standards in the industry. ColorCore has a matte finish on both sides of the sheet. It is environmentally stabilized to withstand the harshest outdoor conditions. This material will not rust, delaminate, or rot when exposed to UV, humidity, or water. ColorCore is made with high-impact resistant polymer to handle more abuse than conventional sign materials. Its thin cap layers and bright primary colors make it ideal for signage, marine, playground, and recreational applications. This polymer sheet never needs painting or refinishing, works like wood and it is easy to fabricate using common woodworking tools and techniques. The material is easy to engrave and machine, as the cap is approximately 0.050" thick.

Applications

Signage and wayfinding, architectural applications, carnival games, children's furniture, marine applications, museums, picnic tables, and point of purchase displays

Typical Properties

Property	Test Method	Units	Values
PHYSICAL			
Density	ASTM D 1505	g/cc	0.955
MECHANICAL			
Tensile strength @ yield	ASTM D 638	psi	>4,100
Tensile modulus	ASTM D 638	psi	255,000
Elongation @ break	ASTM D 638	%	>600
Elongation @ yield	ASTM D 638	%	9.8
Flexural modulus	ASTM D 790	psi	185,000
Flexural stress @ 5% strain	ASTM D 790	psi	3,810
Compressive properties 10% strain	ASTM D 695	psi	4,950
Durometer	ASTM D 2240	Shore D	68
Tensile impact	ASTM D 1822	ft·lbs/in ²	115
Izod impact	ASTM D 256	ft·lbs/in ²	1.1
Screw and nail withdrawal	ASTM D 1761	lbs	657 & 63
THERMAL			
Vicat softening temperature	ASTM D 1525	°C (°F)	123°C (253°F)
Brittleness temperature	ASTM D 746	°C (°F)	< -76°C (-105°F)
Heat deflection temperature @ 66 psi	ASTM D 648	°C (°F)	75°C (167°F)
Flammability	UL94	Rating	HB

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