

# HDPE StarBoard



## Polymer Building Sheet That Lasts a Lifetime

StarBoard ST is a unique and advanced, high-density polyethylene building sheet that lasts a lifetime. It is a product of a proprietary process called K-Stran, the most advanced manufacturing process for superior flatness and consistency. StarBoard ST has a matte gloss finish on both sides of the sheet. It is environmentally stabilized to withstand the harshest outdoor conditions. StarBoard ST will not rust, delaminate, or rot when exposed to UV, humidity, or water. It is one of our most scratch-resistant polymers, making it an excellent construction material for cabinetry, furniture, and architectural partitions. The polymer sheet never needs painting or refinishing, works like wood, and is easy to fabricate using common woodworking tools and techniques.

## Applications

Tabletops and counters, concession stands, equipment, furniture, healthcare case goods, indoor and outdoor cabinets, kick plates, lockers, outdoor kitchens, playgrounds, pool areas

## Typical Properties

Property	Test Method	Units	Values
<b>PHYSICAL</b>			
Density	ASTM D 1505	g/cc	0.963
<b>MECHANICAL</b>			
Tensile strength @ yield	ASTM D 638	psi	>4,500
Tensile modulus	ASTM D 638	psi	318,000
Elongation @ break	ASTM D 638	%	>600
Elongation @ yield	ASTM D 638	%	8.8
Flexural modulus	ASTM D 790	psi	225,000
Flexural stress @ 5% strain	ASTM D 790	psi	4,480
Compressive properties 10% strain	ASTM D 695	psi	4,790
Durometer	ASTM D 2240	Shore D	69
Tensile impact	ASTM D 1822	ft·lbs/in <sup>2</sup>	99
Izod impact	ASTM D 256	ft·lbs/in <sup>2</sup>	1.4
Screw and nail withdrawal	ASTM D 1761	lbs	755 & 55
<b>THERMAL</b>			
Vicat softening temperature	ASTM D 1525	°C (°F)	132°C (270°F)
Brittleness temperature	ASTM D 746	°C (°F)	< -75°C (-103°F)
Heat deflection temperature @ 66 psi	ASTM D 648	°C (°F)	84°C (183°F)
Flammability	UL94	Rating	HB

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.