

KYDEX® 510

Weatherable and decorative sheet

Introduction

KYDEX® 510 is a weatherable sheet with superior performance for thermoforming and a decorative sheet for lamination.

General Information

KYDEX® 510 is available in many distinctive colors and textures. An acrylic cap protects the surface, providing excellent weatherability for outdoor use. This product is now available with decorative caps (black/white granite and rust/grey granite). While excellent in thermoforming, KYDEX® 510 is also being used as damage resistant surface material.

Suggested Applications

- Kiosk Housings
- Equipment Housings
- Medical Products
- Miscellaneous Applications

Features

- Offers same properties of KYDEX® sheet, but in a weatherable formula
- Highly impact resistant as measured by the Notched Izod Impact Resistance test
- Fire retardant (self-extinguishing) with UL Std 94 V-0 and 5V ratings
- Low moisture absorption, resistance to chipping and cracking, great fabrication and machining properties and flexibility
- Excellent forming properties, uniform wall thickness and crisp detail
- Can be drilled, punched and cut using standard woodworking or metal working tools
- Exhibits a Dielectric Constant of 2.76 @ 100 Hz, 2.53 @ 800 MHz and 2.51 @ 1.9 GHz

Environmental and Safety Considerations

KYDEX, LLC is committed to ensuring that its products can be manufactured, transported, stored, used, disposed and recycled with an appropriate regard for safety, health and environmental protection. We support the safe handling of our products. Please contact our Technical Service department at 800.682.8758 for resources or visit our website: <http://www.kydex.com>. For Material Safety Data Sheets, please call 800.325.3133.

KYDEX, LLC

ISO 9001 and 14001 Certified

Customer Service

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www.kydex.com



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Physical Properties

Property	Test Method	Typical Value ¹	
Specific Gravity	ASTM D-792	1.35	
Tensile Strength	ASTM D-638	42 MPa	6,100 psi
Flexural Strength	ASTM D-790	66 MPa	9,600 psi
Modulus of Elasticity	ASTM D-790	2,480 MPa	360,000 psi
Notched Izod Impact Resistance, @ 23°C (73°F)	ASTM D-256	801 J/m	15 ft-lbs/in
Rockwell Hardness (R Scale)	ASTM D-785	94	
Coefficient of Linear Thermal Expansion	ASTM D-696	6.9 x 10 ⁻⁵ / °C	3.83 x 10 ⁻⁵ / °F
Heat Deflection Temperature (HDT) @ 1.8 MPa (264 psi) annealed	ASTM D-648	75.6°C	168°F
Flammability: Underwriters Laboratories, Inc® Component Recognition	UL Standard 94 ²	V-0, 5-V ³	
Forming Temperature		163 - 200°C	325 - 390°F
BS 476 Part 7		Class 1 (1mm)	
¹ Values based upon 3.18mm (0.125") sheet unless otherwise specified. ² Underwriters Laboratories, Inc® ³ Thicknesses ≥1.00mm (≥0.039") Not intended for specification purposes.			

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This information supersedes all previously published data.