



PRODUCTIONS UNLIMITED, INC.

polyonyx+[®]

Performance Flooring

About polyonyx+[®]

polyonyx+[®] is a unique blend of aerated polymers from Productions Unlimited, Inc. that is inherently black and incredibly durable. polyonyx+[®] has the moisture resistance of plastic, the screw retention of hardwood, and the rigidity to be used in everything from stage floors to road cases. It is used to provide durability where other materials have historically been used, but performance was less than desirable.



Ordering information

- Standard 4' x 8' sheets
- Custom sizes may be available
- Available only in black
- Installation screws can be included
- Four available thicknesses

Thickness	Weight	Part Number
1/4" nom. 0.236" (6 mm)	34 lbs (15.3 kg)	PX-PO-BK-025-4X8
3/8" nom. 0.354" (9 mm)	51 lbs (22.9 kg)	PX-PO-BK-037-4X8
1/2" nom. 0.472" (12 mm)	67 lbs (30.6 kg)	PX-PO-BK-050-4X8
3/4" nom. 0.708" (18 mm)	101 lbs (45.9 kg)	PX-PO-BK-075-4X8

Features

- Excellent stage resurfacing solution
- Black color throughout = no painting necessary
- Surface is paintable if required
- Two surface textures for varying levels of slip resistance
- Cut and drill with standard woodworking tools
- Does not absorb water
- Can be thermo-molded
- Excellent screw retention
- Contains an average of 95% recycled content

Other possible uses

- Road Cases
- Portable Riser Tops
- Ramps
- Pit Covers
- Plywood Replacement
- Custom Uses



Columbia High School (Columbia, SC)



Chesapeake Shakespeare (Maryland)



Color-coated polyonyx+[®] used in the climber at The Children's Museum of the Upstate (Greenville, SC)

Summary of Properties

	Test	Imperial	Metric
Specific Gravity	D-792	0.0307 lbs/in ³	0.85 g/cm ³
Tensile Strength	D-638	3,540 psi	24,407 kPa
Impact Test at 73°			
Notched Izod	D-256	2.2 ft-lbs/in	117 joule/m
Garner Drop	D-5420	320 in-lbs	36.155 Nm
Inst. Impact (max. load)	D-3763	1575 lbs	714.4 kg
Inst. Impact (total energy)	D-3763	72 ft-lbs	97.6 Nm
Heat Deflection Temp	D-648	198° F	92.2° C
Hardness	D-785	98 Rockwell-D	
Gardner Gloss	D-523	90%	

	Test	Imperial	Metric
Flexural Modulus	D-790	300,000 psi	2,068,427 kPa
Flexural Strength	D-790	2,470 psi	17,030 kPa
Compressive Strength			
Flatwise	C-365	1,123 psi	7,743 kPa
Core Compressive Modulus	C-365	19,649 psi	135,475 kPa
Fastener Pull-Out			
1/2" Coarse Thread Bolt	D-1761	1,845 psi	12,721 kPa
#8 Screw	D-1761	713 psi	4,916 kPa

All tests were conducted on a .472" sample

Comparative Data - polyonyx+® to Wood

	polyonyx+®		White Pine		Fir Wood	
	Imperial	Metric	Imperial	Metric	Imperial	Metric
Density	0.0307 lbs/in ³	0.85 g/cm ³	0.1988 lbs/in ³	0.55 g/cm ³	0.0206 lbs/in ³	0.57 g/cm ³
Tensile Strength	3,540 psi	24,407 kPa	2,525 psi	17,409 kPa	3,404 psi	23,470 kPa
Compressive Strength (with grain)	1,123 psi	7,743 kPa	565 psi	3,896 kPa	625 psi	4,309 kPa
Compressive Strength (cross grain)	1,123 psi	7,743 kPa	1,800 psi	12,411 kPa	1,700 psi	11,721 kPa
Shore D Hardness	98 Rockwell-D		51 Rockwell-D		38 Rockwell-D	
Water Absorption	Not Absorbed		Absorbed		Absorbed	

Important Care/Maintenance Considerations:

- Petroleum based products should not be used to clean the floor. Simple detergent and water are all that should be needed.
- Placing heat-generating equipment (e.g., hazers, etc.) directly on the surface for an extended period of time may cause warping. It is recommended that some sort of insulation be placed between the polyonyx+® and such equipment.
- If painting, use only latex paint.

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