



King Performance Commodity High-Density Polyethylene

King KPC HDPE is a high-density polyethylene material. It is the product of a proprietary process called K-Stran™, the most advanced manufacturing process for superior flatness and consistency for gauges up to 1 -1/2" thick. Larger gauges are manufactured in our state-of-the-art compression mold or extrusion mold. King KPC HDPE has a natural, smooth gloss finish on both sides of the sheet. It is extremely versatile with outstanding properties and good chemical resistance for a wide variety of applications at a very competitive cost. King KPC HDPE natural is FDA and USDA approved material that can be used for food containers and food equipment.* The material is easy to machine and fabricate.

King KPC HDPE is upgradable to King MicroShield® with an advanced antimicrobial technology for protecting the product surface against stain and odor causing bacteria, algae and fungi.**

King KPC HDPE is upgradable with King FlameShield, for ASTM E-84 Class A Flame Compliance and CAN/ULC-S102 for Canadian Compliance.

For more information about King MicroShield® and King FlameShield, please visit those product pages.

Applications

- Brush Blocks
- Containment Tanks
- Livestock Containment
- Material Handling Systems
- Machined Parts
- Skating Rinks
- Wear Strips

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Specifications

Standard Sheet Size

in: 48" x 96"

mm: 1219 mm x 2438 mm

*This product does not protect users or others against foodborne bacteria. Always clean this product thoroughly after each use.

**For bacteriostatic, fungistatic, & algistatic properties. This product is exempt from registration under 40 CFR 152.25(a). King MicroShield® effectiveness verified by ISO and ASTM standards. This product does not protect users or others from disease-causing bacteria. Always clean this product thoroughly after use.

Standard Colors



Natural

Note: Color accuracy can vary considerably on computer monitors and printers. Please consult your distributor for a product sample before making critical color choices.

Disclaimer: King MicroShield® may affect color.

King FlameShield may affect finish and color.

Standard Gauges

in: 1/8" | 3/16" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | 1-1/4" | 1-1/2"
mm: 3.18 mm | 4.76 mm | 6.35 mm | 9.53 mm | 12.7 mm | 15.88 mm | 19.05 mm | 25.4 mm | 31.75 mm | 38 mm

in: 1-3/4" | 2" | 2-1/4" | 2-1/2" | 3" | 4"
mm: 44.75 mm | 50.8 mm | 57.15 mm | 63.5 mm | 76.2 mm | 101.6 mm

Approximate Weight

lbs: 20 lbs | 30 lbs | 40 lbs | 60 lbs | 80 lbs | 100 lbs | 120 lbs | 160 lbs | 200 lbs | 240 lbs
kg: 9 kg | 13.6 kg | 18 kg | 26 kg | 32 kg | 45 kg | 54.4 kg | 72.5 kg | 90.7 kg | 109 kg

lbs: 280 lbs | 320 lbs | 360 lbs | 400 lbs | 480 lbs | 640 lbs
kg: 127 kg | 145.15 kg | 163.29 kg | 181.43 kg | 217.7 kg | 290 kg

Tolerance Information:

K-Stran™

Gauges 1/8" through 1-1/2" ± 5% | Length and width plus only at room temperature

Compression Molding

Gauges greater than 1" and under 1-1/2" ± 10% | Gauges 1-1/2" and greater plus only | Length and width plus only at room temperature

Note: HDPE Black gauges run from 1/8" through 1"

Custom thickness up to 25"/635 mm with our King Size Blocks and Massive Shapes

Custom sheet sizes, gauges and colors available

Properties	Units	ASTM	Nominal Values
Density	g/cc	D1505	0.955
Tensile Strength @ Yield	psi	D638	>4,100
Tensile Modulus	psi	D638	255,000
Elongation @ Break	%	D638	>600
Elongation @ Yield	%	D638	9.8
Flexural Modulus	psi	D790	185,000
Flexural Stress @ 5% Strain	psi	D790	3,810
Compressive Properties 10% Strain	psi	D695	4,950
Durometer	Shore D	D2240	68
Tensile Impact	ft.lbs./in. ²	D1822	115
Izod Impact Resistance	ft.lbs./in. ²	D256	1.1
Brittleness Temp.	°C (°F)	D746	<-76°C (<-105°F)
Vicat Softening Temp.	°C (°F)	D1525	123°C (253°F)
Heat Deflection Temp. @ 66 psi	°C (°F)	D648	75°C (167°F)
Screw and Nail Withdrawal	lbs	D1761	657 & 63

All values are determined on specimens prepared according to ASTM. | Nominal values should not be interpreted as specifications. | King KPC HDPE is made entirely from FDA and USDA approved material. | King KPC HDPE meets ASTM D4976.

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