

HI-MACS® PERFORMANCE PROPERTIES



HI-MACS® Sheet Dimension & Weight

	THICKNESS	WIDTH	LENGTH	WEIGHT
Actual=metric (Nominal=inches)	12mm (1/2")	760mm (30")	3,680mm (145")	±130 lb
	9mm (3/8")	760mm (30")	3,050mm (120")	± 75 lb
	6mm (1/4")	760mm (30")	2,489mm (98")	± 45 lb

HI-MACS®

www.LGhimacsUSA.com

All colors are available in 1/2" thickness. Please contact the LG Hausys representative for other thickness availability.

PROPERTY	TYPICAL RESULT	TEST
Tensile Strength	6,000 psi	ASTM D 638
Tensile Modulus	1.35 x 10 ⁶ / sq inch (850 kg / sq mm)	ASTM D 638 Nominal
Tensile Elongation	0.5% min	ASTM D 638
Flexural Strength	57.96 Mpa (8,407 PSI)	ASTM D 790
Flexural Modulus	1.34 x 10 ⁶ / sq inch	ASTM D 790
Hardness	60 Pass	ASTM D 2583
Thermal Expansion	0.000018 inch / inch / °F	ASTM D 696
Deflection Temperature (under load)	90 °C (194 °F)	ASTM D 648
Approximate Weight	4.20 lbs per sq ft (20.5 kg / sq m)	
Light Resistance	No Effect - Pass	NEMA LD 3-3.03 ISSFA SST 7.1
Wear and Cleanability	Pass	ANSI Z-124.3 ISSFA SST 3.1-00
Stain Resistance	No Effect - Pass	ANSI Z-124.3 Modified; 3.4 & 11
Fungus and Bacterial Resistance	No Effect - Pass Approved for use in all food zones	ASTM G 21 / ASTM G 22 ANSI / NSF Standard 51
Boiling Water Resistance	No Effect - Pass	NEMA LD 3-3.05 ISSFA SST 8.1-00
High Temperature Resistance	No Effect - Pass	NEMA LD 3-3.06 ISSFA SST 9.1-00
Radiant Heat Resistance	No Effect - Pass	NEMA LD 3-3.10
Izod Impact	0.3 foot lbs per inch (0.016 joules / mm)	ASTM D 256, Method A
Ball Impact Resistance	0.5 lbs (0.23 kg) ball 1/4" slab - 36" drop 1/2" slab - 144" drop	NEMA LD 3-3.08
Weatherability	Pass (1000 hr test)	ASTM D 2565 / ASTM D-1499
Specific Gravity	1.60 grams per cubic centimeter (0.06 lb / inch ³)	ASTM D792 (Density)
Water Absorption	1/4" slab - 0.07% 1/2" slab - 0.4%	ISO 4586-2 / ASTM D570
Toxicity	66.9 grams (2.36 oz)	Pittsburgh Protocol
Flammability*		ASTM E84: Class I or A
Flame Spread Index	<25	*Flammability test result applies to both 1/4" thickness and 1/2" thickness.
Smoke Development Index	<25	
Consistency of Color	Pass	ISSFA SST 2.10 Pass
Visual Defects	Pass	ISSFA SST 5.1 Pass
Flatness of Sheets	Pass	ISSFA SST 4.1