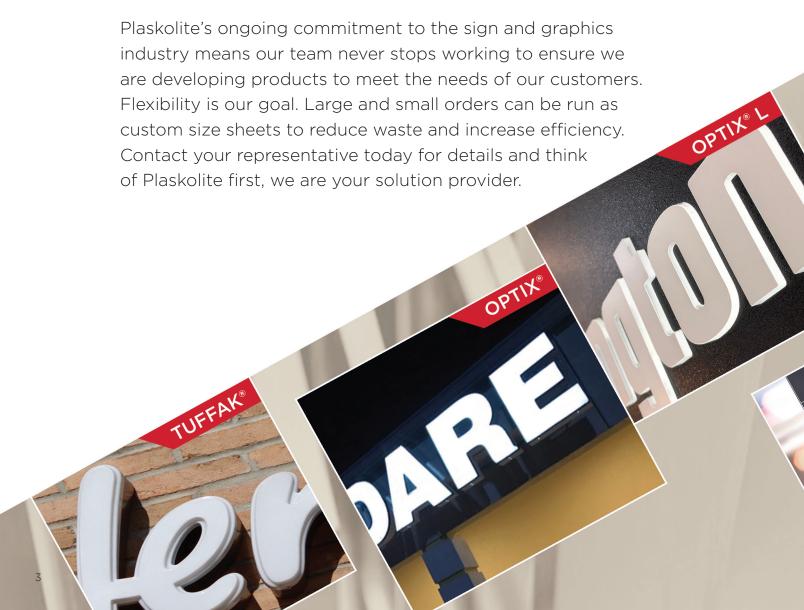


# **PLASKOLITE**

is North America's market leader in sheet and reels for the sign and graphics industry. As the manufacturer of OPTIX® acrylic, TUFFAK® polycarbonate, OPTIX® L and VIVAK® PETG sheet products, Plaskolite has the material solution for your branding needs. Working with our team of experts, specifications to enhance your brand is a snap.

The dedicated team at Plaskolite are here to educate your staff on which sheet product we produce is ideal for your project. With training programs, we can support your team on how to work with OPTIX, OPTIX L, TUFFAK and VIVAK sheets.





# EXTERIOR & Graphics

### FEATURED SOLUTION OPTIX-LD MAX



White 7328
34% Light Transmission
@ 0.118"



White 2447
57% Light Transmission
@ 0.118"



Optix LD MAX 2406 White 68% Light Transmission @ 0.118"

# BESIDES THE INDUSTRY'S BRIGHTEST WHITE, THE LD LINE SHINES IN COLORFUL OPTIX ACRYLIC AND TUFFAK POLYCARBONATE\*

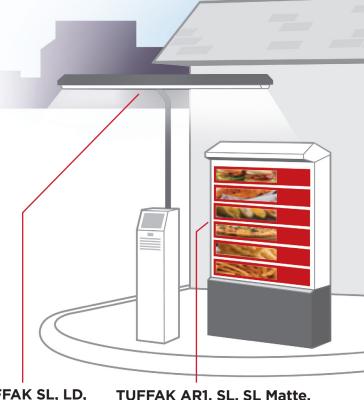
# **OPTIX LD** acrylic sheet

- » Brilliant colors
- » For use with decorative vinyl
- » Shallow cans for channel letters
- » Flat and formed sign faces
- » Sign cabinets
- » High light output
- » Dramatic illumination
- » Reduction of light sources
- » Enhanced digital printing
- » Translucent and dual color perforated films
- » High UV resistance
- » Available in SG

# **TUFFAK® LD** polycarbonate sheet

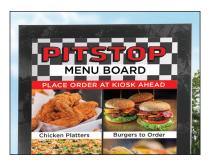
- » Channel letters
- » Sign cabinets
- » Virtually unbreakable
- » Weather resistant
- » Thinner deep draw areas retain strength and light diffusion properties
- » Meets UL 870 standard for use in electric signs
- » UL 94 V-2 flammability rating in 0.094" 0.177"
- » UL 94 V-0 flammability rating in 0.236"

<sup>\*</sup>See page 13 for available colors and sizes



TUFFAK SL, LD, OPTIX SG

TUFFAK AR1, SL, SL Matte, OPTIX SG05



### **TUFFAK® AR1**

- » Hardest hard coat technology
  - Abrasion resistant
  - Chemical resistant
- » Second surface digitally printed
- » Flat applications only



# OPTIX® SG / DURAPLEX

- » Outstanding vacuum definition
- » Optically clear
- » Three levels of impact strength; SG, SG05, SG10
- » Thermoformable
- » Easy to fabricate



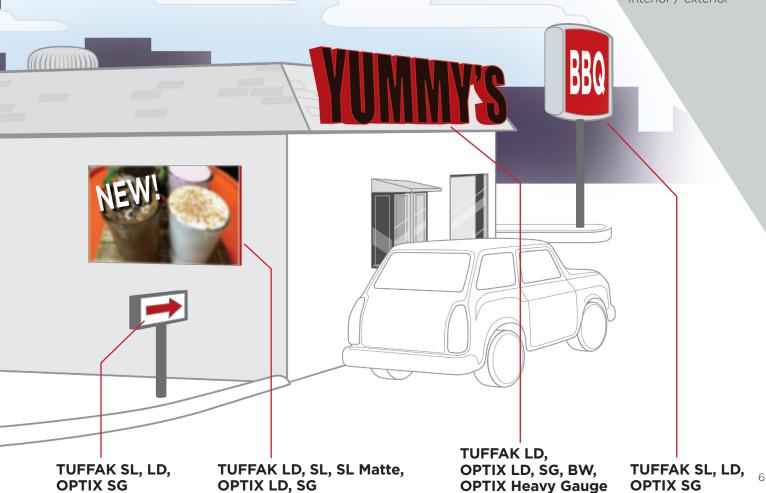
### **TUFFAK SL**

- » Enhanced UV resistance
- » Thermoformable
- » Virtually unbreakable
- » Wide temperature range
- » Thinner deep draw areas retain strength
- » Available in industry standard colors
- » Sheet and reels



## **OPTIX BW** continuous cast

- » Day / Night
- » Black sign in daylight
- » Illuminates white or colored depending on light source
- » Eliminates need for perforated vinyl
- » Smooth gloss finish
- » Easy to fabricate
- » Interior / exterior



# INTERIOR agns & Graphics







### **OPTIX MYST**

- » Internal frost
- » Will not heat or form out
- » Superior craze resistance
- » Soft light diffusion
- » Gloss finish



### **OPTIX 95**

- » Matte finish one side
- » Second surface decoration
- » Reduction in surface reflection
- » Custom colors available
- » Additional matte finishes



### **OPTIX Frost**

- » Translucent
- » Textured two sides
- » Easy to fabricate without significant loss of frost appearance
- » Line bends
- » Interior and Exterior



#### **OPTIX E-DA**

- » Erasable direct-to-print sheet
- » Abrasion resistant
- » Functional message
- » Frameless installations



### **OPTIX L & EL**

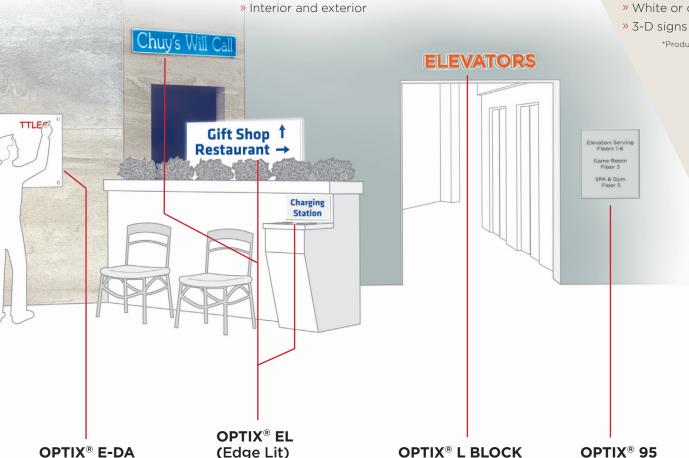
- » Bright and even edge illumination
- » Continuous Cast
- » Single or doublesided sign
- » Ideal for low profile signage for interiors/ wayfinding
- » ADA sign compliant



### **OPTIX® L BLOCK** cell cast acrylic\*

- » Even illumination and diffusion for trimless letters
- » Alternative to traditional channel letters
- » Thick gauge acrylic that allow for routing and embedding LEDs
- » White or colored LEDs

\*Product not manufactured by Plaskolite



# DISPLAY Graphics & Displays





### **OPTIX®** Thick

- » Crystal Clear
- » Impact resistant
- » Custom colors available



### **VIVAK® PETG**

- » Interior use
- » Durable
- » Flexible
- » Deep draws and complex die cuts
- » Easily decorated: painting silkscreen or hot stamp
- » Available in sheets only



### **OPTIX 99**

- » Ultra light matte finish
- » Glare reduction
- » Half the weight of glass
- » Shatter resistant
- » Translucent
- » Interior and Exterior



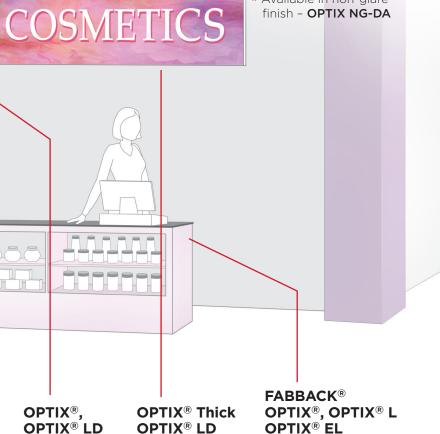
### **FABBACK**®

- » Over 20 colors
- » Clear or see-through
- » Ease of fabrication
- » Wide range of standard gauges
- » Flat sheet only



### **OPTIX DA & NG-DA**

- » Eliminate vinyl decoration
- » Eliminate adhesion promoters
- » Strong ink adhesion allowing graphics to be printed to the edge
- » Certified with all leading digital flatbed printers
- » Available in clear, white, custom colors
- » Available in non-glare





# PRODUCT SELECTION GUIDE

PRODUCT / ATTRIBUTE / TYPE - MATERIAL											
TRODUCT / ATTRIB				Continuous		PC	PETG	Impact	Durability	Patterns	Abrasion
				Cast	Acrylic			Resistant			Resistant
OPTIX LD MAX 2406			•								
TUFFAK LD	Lig Diffu		•			•		Superior Impact Strength	<b>✓</b>		
OPTIX LD			•								
OPTIX L-BLOCK	_				•				<b>✓</b>		
OPTIX DA	_		•								
OPTIX NG-DA			•							<b>✓</b>	
OPTIX E-DA			•								<b>✓</b>
VIVAK	Dig Prin		•				•	Superior Impact Strength			
TUFFAK AR1	_		•			•		Superior Impact Strength	<b>✓</b>		<b>✓</b>
TUFFAK NR	No Refle		•			•		Superior Impact Strength	<b>✓</b>	<b>✓</b>	
TUFFAK NR-C	No Refle Coa	ctive	•			•		Superior Impact Strength	<b>✓</b>	<b>✓</b>	<b>✓</b>
OPTIX EL	Edg	e Lit		•							
OPTIX L	Stan	dard		•							
OPTIX L BW	Bac	k Lit		•							
OPTIX SG, SG05, SG10			•						<b>✓</b>	<b>✓</b>	
TUFFAK SL		gn ade	•			•		Superior Impact Strength	<b>✓</b>		
OPTIX Frost (Infused)	_		•							<b>✓</b>	
OPTIX 95 (Matte finish)			•							<b>✓</b>	
TUFFAK SL Matte	Transl	ucent	•			•		Superior Impact Strength	<b>√</b>	<b>✓</b>	
OPTIX L Myst (infused)	_			•					<b>✓</b>	<b>✓</b>	

				FE	ATURE	S AND BENEF	ITS			
High Clarity		Exterior	Flexibility	Cold Forming	Digital Print	Thermoformable	Superior Diffusion	UV Enhanced	Reels	Chemical Resistant
	<b>✓</b>	<b>✓</b>	✓		<b>✓</b>	✓	<b>✓</b>	✓	<b>✓</b>	
	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	
	<b>✓</b>	<b>✓</b>				✓	<b>✓</b>	<b>✓</b>		
	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	✓	✓		<b>✓</b>
<b>✓</b>	<b>✓</b>	NA			<b>✓</b>					
	<b>✓</b>	NA			✓					
✓	<b>✓</b>	NA			<b>✓</b>					<b>✓</b>
<b>✓</b>	<b>✓</b>	NA	✓	✓	<b>✓</b>	✓				
<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>			<b>✓</b>		<b>✓</b>
	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>		<b>✓</b>		
	<b>✓</b>	<b>✓</b>			<b>✓</b>			<b>✓</b>		<b>✓</b>
	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	<b>✓</b>	✓	✓		<b>✓</b>	✓	✓	✓	<b>✓</b>	✓
	<b>✓</b>	<b>✓</b>	✓		<b>✓</b>	✓	✓	<b>✓</b>	<b>✓</b>	
	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>	
	<b>✓</b>	<b>✓</b>				<b>✓</b>				
	<b>✓</b>	NA				<b>✓</b>				
	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>	
	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓		✓		<b>✓</b>

# TYPICAL PROPERTIES

Property	Test Method	Units	Values			
Fioperty	rest Method	Offics	OPTIX L	OPTIX LD / SO	TUFFAK SL	
PHYSICAL						
Specific Gravity	ASTM D792	-	1.19	1.19	1.2	
Optical Refractive Index	ASTM D542	-	1.49	1.49	1.586	
Light Transmission - Clear	ASTM D1003	%	92	>90	86	
Light Transmission - Haze	ASTM D1003	%	>1	*	-	
Sound Transmission	ASTM E90 / E413	db	27	27	24	
Water Absorption	ASTM D570	%	0.2	0.4	0.15	
MECHANICAL						
Tensile Strength	ASTM D638	psi	11,000	11,030	9,500	
Tensile Modulus of Elasticity	-	psi	465,000	490,000	340,000	
Flexural Strength	ASTM D790	psi	14,700	17,000	13,500	
Izod Impact Strength - Notched	ASTM D256	ft-lb/in	3.2	0.4	18	
Izod Impact Strength - Unnotched	ASTM D256	ft-lb/in	-	-	60 (no break)	
Rockwell hardness	ASTM D785	-	M-100	M-95	M-70 / R118	
THERMAL						
Deflection Temperature @ 264 psi	ASTM D648	°F	200	203	270	
Deflection temperature @ 66 psi	ASTM D648	°F	-	207	280	
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F	3.5 × 10 <sup>-5</sup>	3.0 x 10 <sup>-5</sup>	3.75 x 10 <sup>-5</sup>	
Thermal Conductivity	ASTM C177	Btu-in/hr•ft²°F	0.12	0.075	1.35	
Smoke Density Rating	ASTM D2843	%	13.5	>16.5	57.7	
Self-Ignition Temperature	ASTM D1929	°F	750	833	1022	
Horizontal Burn @ 0.236"	ASTM D635	in/min	0.65	>1	<1	
Flammability	UL 94	94 HB	НВ	НВ	НВ	
ELECTRICAL						
Volume Resistivity	ASTM D257	Ohms/cm	>3.92 x 10 <sup>15</sup>	-	8.2 x 10 <sup>16</sup>	
Dielectric Constant @ 10Hz	ASTM D150	-	3.0-3.6	-	2.96	
Dielectric Constant @ 60Hz	ASTM D150	-	2.7	-	3.17	

# INDUSTRY STANDARD COLORS

lors

Standard Plaskolite Color	PMS Cross Ref.	<b>OPTIX</b> ®	OPTIX® L	TUFFAK® SL	TUFFAK® LD	Standard Gauge*
Clear	-	-	-	Yes	-	0.093″- 0.236″
White 7328	-	Yes	Yes	Yes	Yes	0.060″- 0.236″
White 2406	-	Yes	Yes	-	-	0.118"0500"
White 2447	-	Yes	Yes	-	Yes	0.093″- 0.236″
Black	Black C	-	Yes	-	-	0.177″
Yellow 8197	7548 C	Yes	Yes	-	-	0.093″- 0.236″
Green 7235	2426 C	Yes	Yes	-	-	0.093″- 0.236″
RED 2157	485 C2X	Yes	Yes	-	-	0.118″ - 0.177″
Red 2283	485 C	Yes	Yes	Yes	Yes	0.118″ - 0.177″
Red 6192	-	-	-	Yes	-	0.118″- 0.177″
Red 2793	186 C	Yes	-	Yes	Yes	0.118″ - 0.177″
Blue 2114	288 C	Yes	Yes	Yes	Yes	0.118″ - 0.177″
Blue 2050	280 C	Yes	Yes	-	-	0.118″ - 0.177″
Blue 2051	300 C	-	-	Yes	Yes	0.118″ - 0.177″
Green 2108	349 C	Yes	-	Yes	Yes	0.118″ - 0.177″
Yellow 2037	Yellow C	Yes	Yes	Yes	Yes	0.118″ - 0.177″
Orange 2119	166 C	Yes	-	Yes	Yes	0.118″- 0.177″

<sup>\*</sup>Optix L - All "White" color Standard Gauges 0.118" - 0.177"

### **Custom colors available - call Customer Service for details**

# **CUSTOMIZED SERVICES**

Custom Extrusion for any Specification - Low Minimums, Fast Turn-Around

### **RUN-TO-SIZE PROGRAM**

PLASKOLITE OFFERS THE FLEXIBILITY OF RUNNING CUSTOM SHEET IN THE SIZES YOU AND YOUR CUSTOMERS NEED

### PLASKOLITE also offers Run-To-Size for:

- » OPTIX® Acrylic in Clear, Colors and Patterns
- » DURAPLEX Impact Modified Acrylic
- » VIVAK® PETG Sheet

Wide range of sizes up to 105"

Thickness range from 0.040" to 1.0"

### Low minimum order requirements

# Quick turn-around times - the shortest in the industry

### Non-stock material:

- » Special tolerances, film coverages, thicknesses and sizes available
- » Saw cut edges available
- » 3,000 lb. minimum order required for a custom thickness of clear acrylic
- » 3,000 lb. minimum required for color production run
- » Minimum required for standard color production run, contact representative

## One-time custom color - 20,000 lb minimum

### On line production:

- » Saw cut and slitter / hot knife edges available
- » Sheet edges may vary please specify preferred edge cut at the time of order

### Available for thicknesses .060" - .236"

» TUFFAK® SL Clear - 1.000 lb minimum

## TUFFAK SL Standard Colors - 3,000 lb minimum

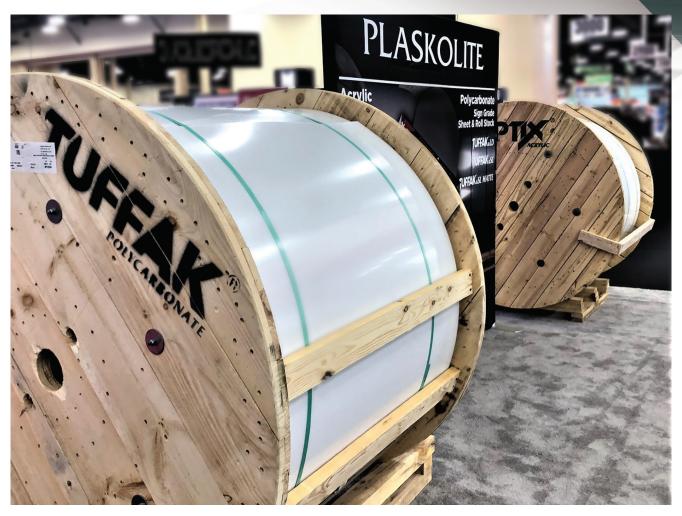
» B54 - White

» B59 - White

**CALL CUSTOMER SERVICE FOR DETAILS AND MINIMUMS 1.800.848.9124** 

# ACRYLIC AND POLYCARBONATE REEL STOCK

BETTER TOTAL SHEET UTILIZATION, LESS SEAMS AND JOINTS IN FINISHED SIGNS, PROVIDES BETTER INVENTORY MANAGEMENT AND STORAGE



Contact customer service for standard and custom reel lengths and widths

### **PLASKOLITE**

### A GLOBAL LEADER IN THE PRODUCTION OF THERMOPLASTIC SHEET

#### **FOUNDED IN 1950**

Our Mission: to deliver superior thermoplastic sheet, coatings and polymers to the world, through long-lasting customer relationships and hands-on customer service.

#### MANUFACTURING LOCATIONS



From our founding, PLASKOLITE strives to treat our employees, our customers, our community and the world, with kindness, dignity and respect. This drives our continuing effort to create sustainable products, in a sustainable manner, for future generations. This on-going commitment is expressed in the

**PLASKOLITE Sustainable Ecosystem:** 

### **QUICK FACTS**

STATUS: Privately held

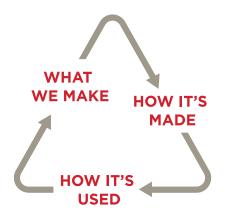
GLOBAL HEADQUARTERS: Columbus, OH

EMPLOYEES: 1900 Worldwide

**MARKETS SERVED:** Signage, Lighting, Retail Display, Construction, Transportation, Security, Bath & Spa, Industrial, Architecture, Green Houses

### **OUR PILLARS OF SUSTAINABILITY**

### EACH CONTRIBUTES TO MAKING THE WORLD A BETTER PLACE



**WHAT WE MAKE** Versatile, high-quality, durable

thermoplastic materials...not single-use

plastics

**HOW IT'S MADE** How we make our products reflects

our overall philosophy of continuous

environmental improvement

**HOW IT'S USED** Our thermoplastics play an important

role in advancing human well-being, energy conservation and quality of life

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.

PLASKOLITE

1-888-CURBELL

www.curbellplastics.com

Curbell Plastics is a proud supplier of Plaskolite materials.

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