



PROFESSIONAL PLASTICS

LUMAsite®

LUMAsite® shatterproof sheets cast from 100% acrylic or modified polyester resins. The superior toughness and rigidity of LUMAsite® sheets are the result of reinforcement by an immensely strong web of glass fibers. In sign and display whites and colors these fibers are not visible. In most architectural and designer panels the fibers are deliberately visible, lending a "silken cobweb" effect. LUMAsite® panels retain their strength and color identity even when exposed long years to most severe outdoor conditions.

ORDER *Online* <http://www.professionalplastics.com/LUMASITE>

LUMAsite®

Frost-SOS is a light-diffusing panel with an exotic "silken cobweb" appearance. The random glass fibers contribute remarkable beauty. As a lighting diffuser or light-transmitting architectural panel, Frost-SOS combines striking aesthetics and high light transmission. This effect is also available in delicate tints (Sky-SOS, Jade-SOS).



LUMAsite®

Parchment-SOS is a light-diffusing panel with a subtle "Shoji" effect. As a lighting diffuser or translucent architectural panel, Parchment-SOS combines a clean white appearance and high light transmission (slightly lower than Frost-SOS).



LUMAsite®

Rice-SOS is a light-diffusing panel with a stronger "Shoji" effect. Often used in oriental decor, fixtures, and interior treatments, Rice-SOS panels combine an off-white rice paper appearance (particularly in thinner gauges) and medium-high light transmission.



LUMAsite®

Crystal II panels are used in glazing and partition applications requiring high light transmission and superior impact strength. These near-clear panels are supplied with a micrograin gloss finish on both sides, or with a matte or pebbled surface on one side (refer to Crystal II-SOS and Crystal II-POS). The standard micrograin gloss is a medium-reflectivity surface with a slight texture that contributes less diffusion than the matte or pebbled finishes.





By embedding various materials into the panel when casting reinforced acrylic-modified polyester panels, new vistas are opened to the specifier. Woven cane-like embedments with a natural look include Coco Reed, Rattan, and Kane. Honeycomb and Black Lace are knitted fabric embedments with a contemporary look.

Embedment of special papers printed with graphics seals the graphics into the panel. Once cast into fiberglass, the sign, display or decorative panel exhibits superior toughness, durability and vandal-resistance. Common applications for graphic embedments include industrial and safety signage, transit sign panels, and interpretive panels for parks, zoos and museums.

Diamond Design (DD3448) is the designation given to an embedment panel incorporating 3/4"x 1-1/2" expanded aluminum mesh, resulting in a panel with toughness, rigidity and resistance to penetration. At the same time, the diamond-shaped openings form an attractive pattern that allows generous passage of light.

White - 1000 SOS is an opalescent, translucent white panel. Used as a lighting diffuser or translucent architectural panel, casts diffused, glarefree light.

White varieties for sign and display applications include:

White 1020, a translucent sign white commonly used as a sign background for signs illuminated with high-output fluorescent lamps.

White 2020, offering similar diffusion in thinner gauge (.045" and .060") for smaller signs, displays and illuminated advertising panels.

White 1040, a bright white opaque panel suitable for sign and architectural applications. White 1040 panels are available smooth both sides or pebbled on one side (refer to White 1040-POS)

Standard Colors: Ten standard sign colors are available, including translucent ivory, bright translucent colors, a deep translucent blue, opaque browns and black.

Physical Property Data	
Flexural Strength	20,000 psi
Flexural Modulus	1,000,000 psi
Tensile Strength	14,000 psi
Compressive Strength	25,000 psi
Impact Str. Izod, notched	6 ft. - lbs / in.
Coeff. of Expansion	.00002 in. / in. °F

EXIT Fixture diffusers have very high light transmission, and at the same time, sufficient diffusion to mask the light source and minimize "hot spots". **Hi-LITE Red** is a translucent red diffusing panel. **Lite Emerald** is a translucent green diffusing panel.



ORDER *Online* <http://www.professionalplastics.com/LUMASITE>

Fiberglass-reinforced acrylic sheets: Application Summary Table

Color	Description	Thickness Range for Typical Application			
		Glazing	Lighting	Partitions, Facia	Signs
Frost-SOS*	"Silken cobweb" effect, high trans.	.060-.250	.045-.125	.060-.250	
Parchment-SOS*	Gentle "Shoji" effect, high trans. white	.090-.250	.090-.125	.090-.250	
Rice-SOS*	Gentle "shoji" effect, med-high trans. off white	.060-.250	.045-.125	.060-.250	
Sky-SOS*	Pale blue "Shoji" effect		.045-.090	.060-.125	
Jade-SOS*	Pale Green "Shoji" effect		.045-.090	.060-.125	
White 1000-SOS*	High Diffusion, opalescent	.060-.125	.045-.150	.060-.250	
White 1020	Sign White, Translucent	.060-.125		.060-.125	.060-150
White 2020	Display White, Translucent				.045-060
White 1040	Porcelain white, opaque			.060-.125	.060-150
White 1040-POS+	Opaque White, pebbled			.060-.125	
Ivory 02146-SOS*	Creamy White, Translucent				.060-150
Yellow 02037	Bright Yellow, Translucent				.060-150
Orange 02119	Bright Orange, Translucent				.060-150
Red 315	Fire Engine Red, Translucent				.060-150
Blue 02051	Medium Blue, Translucent				.060-150
Blue 02114	Dark Blue, Translucent				.060-150
Green 02030	Medium Green, Translucent				.060-150
Black 02025	Black, Opaque				.060-150
Brown 240-SOS*	Chocolate Brown, Opaque				.060-150
Brown 239-SOS*	Dark Brown, Opaque				.060-150
Hi-Lite Red	Efficient Diffuser (for exit)		.045-090		.060-150
Lite Emerald	Efficient Diffuser (for exit)		.045-090		.060-150
Crystal II	Near-Clear	.060-125	NR~	.060-.125	.060-125
Crystal II-SOS*	Lightly Frosted	.060-125	NR~	.060-.125	
Crystal II-POS+	Diffused	.060-125	NR~	.060-.125	
Coco Reed	Brown cane-like embedment	.060-125	NR~	.125	
Kane	Light Colored cane-like embedment	.060-125	NR~	.125	
Rattan	Deep two tone cane-like embedment	.060-125	NR~	.125	
Honeycomb	Contemporary tan embedment		NR~	.090-.125	
Black Lace	Contemporary Black embedment		NR~	.090-.125	
Diamond Design	Metal embedment (large diamond opening)	.125	NR~	.125	

- SOS - Indicates matte finish on one side
- + POS - Indicates lightly pebbled texture one side
- NR~ - Not Recommended

ORDER *Online* <http://www.professionalplastics.com/LUMASITE>



Light Transmissions for Lighting / Architectural varieties:							
Thickness → Color ↓	.045	.060	.090	.125	.150	.180	.250
Frost-SOS Parchment-SOS	82	80 71	76 70	72 68	69	64	59
Rice-SOS White 1000-SOS	71	72 70	65 62	61 58	55	49	42
Sky-SOS Jade-SOS		52 62	46 55	41 48			

Light Transmissions for Sign background, lightbox, and EXIT varieties:					
Thickness → Color ↓	.040	.060	.100	.125	.150
White 1020 White 2020	42	46 39	35	30	24
Ivory 02146 Yellow 02037 Red 315		50 40 12	42 32 8	39 26 7	
Hi-Lite Red Lite Emerald	19 26	18			

All Light transmissions are determined using an incandescent light source, and are relative to air (air=100%)

Minimum Radius Recommendations for installation along a simple curve	
Thickness	Minimum Radius*
.060*	5 feet
.090*	8 feet
.125*	12 feet

*Not applicable to Crystal II varieties. Only gentle simple curvature should be imparted to the Crystal II variety in any thickness.

Flammability LUMAsite® sheets are combustible. Fire precautions similar to those appropriate for wood-based products should be observed. Fiberglass-reinforced acrylic classifies as a CC 2 material, which means that it exhibits a burning rate of less than 2-1/2-inches per minute when tested by the ASTM D-635 method. Some reinforced acrylic varieties of LUMAsite® sheets, include Frost-SOS and White 1000-SOS, are available in a type FR (fire-retardant) that classifies as a CC 1 material in .090" and thicker gauges, which means that the material stops burning when tested by the ASTM D-635 method. Type FR panels also fall into a Class C category (NFPA 255) in some thicknesses, which means that they exhibit flamespread and smoke density values within specific ranges when tested by the ASTM E-84 method. Additional information regarding burning characteristics can be supplied upon request. Note that no fire-retardant version of the Crystal II or embedment varieties is available.

ORDER *Online* <http://www.professionalplastics.com/LUMASITE>

www.professionalplastics.com

sales@proplas.com

USA (888) 995-7767 – Singapore +65 6266-6193 – 台湾 Taiwan +886 (3) 5357850