

PRODUCT:

Select from over 250 standard Lumicor products from our product families: Textures including Embossed, Industrial, Textiles, and Natural, and Colors including True, Woven, and Shimmer. Or create your own custom Lumicor by combining décors. For example, combine a Color with a Texture to add color and depth. Lumicor can also incorporate Customer Owned Materials (C.O.M.). Call for more details.

SIZE:

Sheet Thickness
Lumicor is available in gauges from 1/16" to 1" with a standard tolerance of +/- 10%. Tolerance varies by décor.

Gauge Equivalents		
Fraction	Decimal (in)	Metric (mm)
1/16"	.060	1.5
1/8"	.118	3.0
5/32"	.160	4.1
3/16"	.196	5.0
1/4"	.236	6.0
3/8"	.354	9.0
1/2"	.472	12.0
3/4"	.708	18.0
1"	.944	24.0

The appropriate thickness will depend on the application. Typically, 1/16" and 1/8" are used for light duty applications such as cabinet doors and display fixtures or where flexibility is desired. Our most common gauge is 1/4" and is suitable for a wide range of glazing applications such as office partitions and interior windows. For horizontal applications, a thickness of 1/2" or greater is recommended. Lumicor provides an online interactive tool to determine estimated deflection. See www.lumicor.com for more information.

SHEET DIMENSIONS:

Many Lumicor products are available in the following sheet sizes:

- 4' x 8' Standard (48" x 96")**
- 4' x 10' Oversize (48" x 120")**
- 5' x 10' Oversize (59" x 120")**

Actual dimensions may vary by décor, and some décors are not available in oversize sheets. Minimums may apply.

FINISHES:

Lumicor products are available in a variety of surface finishes to provide different aesthetics. You can specify different finishes on each side of the sheet. The most common surface finishes are matte and gloss. A matte finish provides a medium level of translucency and a softer view of the décor. In contrast, a gloss finish provides a high level of translucency and a sharper view of the décor. Both matte and gloss finishes can be resurfaced if damaged during service (see fabrication guide on www.lumicor.com for more details). Lumicor's heavier finishes such as frost and satin provide better protection against minor surface scratches, but they can only be resurfaced to a gloss or matte finish.

The following is a list of standard finishes:

H - Matte **A - Gloss** **D - Sandstone**
K - Frost **L - Satin** **U - Moire**
T - Diffusion **E - Adobe**

RESIN:

Lumicor is manufactured using several high performance engineering resins, including acrylic, cross-linked acrylic, and PETG. The resin used will depend on the performance requirements of your project.

Lumiclear (Acrylic) – Outstanding clarity, UV stability, scratch resistance, and renewable surface.

Lumiguard (Cross-linked Acrylic) – All the benefits of acrylic plus enhanced chemical and stain resistance.

Lumiform (PETG) – Superior impact resistance, lower flammability, and greater flexibility.

PROTECTIVE FINISH OPTIONS:

ChemShield is a high performance clear film that can be applied to one or both sides of Lumiclear or Lumiguard products. With Chemshield applied, Lumicor products can be used in environments requiring superior stain and chemical resistance. ChemShield is available in all Lumicor textures, but cannot be renewed if damaged.

FABRICATION:

Lumicor material is easily fabricated using standard woodworking tools or glass or stonecutting tools, depending upon the décor. Many Lumicor products can be thermoformed into unique shapes for dramatic design possibilities. If your Lumicor application will be exposed to moisture, it is important to seal the edges after fabrication to prevent wicking. Detailed fabrication guides are available online.

FRAME DEPTH:

When installing Lumicor products into framed systems, it is important to use adequate frame depth to maintain the panel within the system. The recommended frame depth is based on sheet length.

SHEET LENGTH	in	24	36	48	60	72	84	96	108	120
	mm	610	914	1219	1524	1829	2134	2438	2743	3048
FRAME DEPTH	in	7/16"	5/8"	3/4"	7/8"	15/16"	1"	1 1/8"	1 3/16"	1 1/4"
		0.438	0.625	0.75	0.875	0.938	1	1.125	1.188	1.25
	mm	12	15	17	20	22	25	27	30	32

EXPANSION/CONTRACTION:

Lumicor products will expand and contract nominally with changes in temperature. Please allow for expansion / contraction when installing fasteners, hardware, frame systems, or when edge butting sheets. The formula below can be used to calculate the appropriate allowance for expansion and contraction:

Lumiclear	Length, Width or Thickness	X	Temperature Change	X	Coefficient of Thermal Expansion	=	Expansion Allowance
Empirical	Inches	X	°F	X	.00003	=	Inches
Metric	mm	X	°C	X	.000054	=	mm

Lumiguard	Length, Width or Thickness	X	Temperature Change	X	Coefficient of Thermal Expansion	=	Expansion Allowance
Empirical	Inches	X	°F	X	.00004	=	Inches
Metric	mm	X	°C	X	.00007	=	mm

Lumiform	Length, Width or Thickness	X	Temperature Change	X	Coefficient of Thermal Expansion	=	Expansion Allowance
Empirical	Inches	X	°F	X	.00005	=	Inches
Metric	mm	X	°C	X	.00009	=	mm

Example:

Lumiclear	48" X 31°F X 0.00003 = 0.045"
	1219mm X 17°C X 0.000054 = 1.12mm
Lumiguard	48" X 31°F X 0.00004 = 0.060"
	1219mm X 17°C X 0.00007 = 1.45mm
Lumiform	48" X 31°F X 0.00005 = 0.074"
	1219mm X 17°C X 0.00009 = 1.86mm

WEIGHT:

All weights are estimated; actual weights will vary depending on decor.

Lumiclear and Lumiguard									
Thickness	in	1/8"	5/32"	3/16"	1/4"	3/8"	1/2"	3/4"	1"
	mm	0.118	0.16	0.196	0.236	0.354	0.472	0.708	0.944
Weight per square foot	Lbs/ft ²	0.73	0.99	1.21	1.46	2.19	2.92	4.38	5.84
Weight per square meter	kg/m ²	3.57	4.84	5.92	7.13	10.70	14.27	21.40	28.53
4'x8' sheet	Lbs	23.4	31.7	38.8	46.8	70.1	93.5	140.3	187.0
1219x2438 mm sheet	kg	10.6	14.4	17.6	21.2	31.8	42.4	63.6	84.8
4'x10' sheet	Lbs	29.2	39.6	48.5	58.4	87.7	116.9	175.3	233.8
1219x3048 mm sheet	kg	13.3	18.0	22.0	26.5	39.8	53.0	79.5	106.0
5'x10' sheet	Lbs	36.5	49.5	60.7	73.0	109.6	146.1	219.1	292.2
1499x3048 mm sheet	kg	16.3	22.1	27.1	32.6	48.9	65.2	97.8	130.4

Lumiform									
Thickness	in	1/8"	5/32"	3/16"	1/4"	3/8"	1/2"	3/4"	1"
	mm	0.118	0.16	0.196	0.236	0.354	0.472	0.708	0.944
Weight per square foot	Lbs/ft ²	0.78	1.06	1.29	1.56	2.34	3.12	4.68	6.24
Weight per square meter	kg/m ²	3.81	5.16	6.32	7.61	11.42	15.23	22.84	30.45
4'x8' sheet	Lbs	24.9	33.8	41.4	49.9	74.8	99.8	149.7	199.6
1219x2438 mm sheet	kg	11.3	15.3	18.8	22.6	33.9	45.2	67.9	90.5
4'x10' sheet	Lbs	31.2	42.3	51.8	62.4	93.6	124.7	187.1	249.5
1219x3048 mm sheet	kg	14.1	19.2	23.5	28.3	42.4	56.6	84.9	113.1
5'x10' sheet	Lbs	39.0	52.9	64.7	78.0	116.9	155.9	233.9	311.8
1499x3048 mm sheet	kg	17.4	23.6	28.9	34.8	52.2	69.6	104.3	139.1

DEFLECTION:

Lumicor sheets will deflect to varying degrees based on part dimension, resin type, decor, and applied load. Lumicor provides an online interactive tool to determine estimated deflection. See the deflection matrix online at www.lumicor.com.

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