



INNOVATIVE | PRACTICAL | BEAUTIFUL

Technical Guidelines and Fabricating Documents



NATURE+ PANELS (organic or fabric interlayer)

- KEY FEATURES

- Impact strength is greater than acrylic and approaches polycarbonate
- Lightweight: half the weight of traditional glass making installation/fabrication a breeze
- Self-extinguishing and VOC free (volatile organic compounds)
- Custom sizes and interlayers available upon request (8-10 weeks delivery for custom orders)

- PANELS SIZES

- Standard panel size: 4' x 8' (1.2m x 2.4m) / all dimensions are subject to a 3/16" tolerance
- Standard panel gauge: 3/16" (other gauges available)

- PANEL WEIGHT

▪ 3/16" (4.7mm)	1.2lb/ft ²	(approx. 40lbs) *
▪ 1/4" (6.3mm)	1.7lb/ft ²	(approx. 55lbs)
▪ 3/8" (9.5mm)	2.5lb/ft ²	(approx. 80lbs)
▪ 1/2" (12.7mm)	3.3lb/ft ²	(approx. 110lbs)

- AVAILABLE COLORS/INTERLAYERS

- NATURE+ panels are currently available with **14 organic interlayers** and **3 textile interlayers**
- Clients can request a different or custom interlayer (email sales@lumigraf.ca for details); minimums apply

- FINISHES

- Standard finish is **SANDSTONE** – a durable finish with a subtle texture
- Glossy finish is also available upon request (longer lead times)
- LUMIGRAF can also apply a vinyl backing onto NATURE+ panels for backlit applications

- PANEL COMPOSITION

- Co-polyester (PETG) and one or more of the following: Polyester, Rayon, Nylon, Ramie, Cotton, Silk, Natural Straw or foliage, Paper, Wood, Bamboo

- STORAGE

- Nature+ sheets should be fully supported across entire surface in a controlled environment free of direct sunlight, moisture, temperature extremes, and solvent vapors. It is best if stored in original packaging in panel racks that fully support the panel surface at 10° from vertical. Horizontal storage is acceptable for short periods if panels are clean and larger sized sheets are on the bottom to prevent overhang of any portion of the sheet.

- CLEANING

- Use warm water, mild soap or detergent, and a soft sponge, cloth, or chamois to clean Nature+ products
- Do not use glass cleaning products, acetone, gasoline, benzene, lacquer thinner, chlorinated solvents, gritty abrasive scouring compounds, or alkaline cleaners to clean Nature+ products
- Do not use squeegees, scrapers, or synthetic rags that may scratch**

- FABRICATING

- See appropriate documents (cutting, drilling, bonding, edge sealing)

- SCRATCH REPAIR

- On sandstone finish: light scratches and scuffs can be repaired with a polishing cream such as the NOVUS system**
See manufacturer recommendations for detailed instructions

STONE+ PANELS (alabaster for backlit applications)

NOTE: STONE+ panels are finished on one side only and are designed to be back-lit

- KEY FEATURES

- Natural in appearance, acquires depth when back-lit. Beautiful translucent effect
- Can be used in outdoor applications
- Surface is easy to clean and maintain
- Lightweight and requires no special equipment for fabrication or installation

- PANELS SIZES

- Standard panel size: 4' x 8' (1.2m x 2.4m) / all dimensions are subject to a 3/16" tolerance
- Standard panel gauge: 1/4" (3/8" also available – minimum order 5 sheets)

- PANEL WEIGHT

▪ 1/4"	(6.3mm)	2.25lb/ft ²	(approx. 72lbs) *
▪ 3/8"	(9.5mm)	3.5lb/ft ²	(approx. 115lbs) minimum order 5 sheets

- STORAGE

- STONE+ panels should be fully supported across entire surface in a controlled environment. Horizontal storage is acceptable for short periods if panels are clean and larger sized sheets are on the bottom to prevent overhang of any portion of the sheet.

- PANEL COMPOSITION

- Polyresin (Styrene Acrylic Polymer)

- AVAILABLE COLORS/PATTERNS

- STONE+ panels are currently available **6 colors / 2 patterns**

- FINISHES

- Standard finish is **HONED (satin)**

- CLEANING

- Use warm water, mild soap and/or liquid detergent, and a soft sponge, cloth, or chamois to clean STONE+ products
- Use a soft cloth to blot dry. Do not rub surface with dry cloth as it could scratch the surface
- Do not use scouring compounds, gasoline, benzene, acetone, carbon tetrachloride, de-icing fluids, lacquer thinner or other strong solvents
- **Do not use squeegees, scrapers, or synthetic rags that may scratch**

- FABRICATION

- STONE+ panels can be cut with traditional wood or plastic cutting tools. When drilling, make sure to use a supporting panel or chipping may occur. Drilling should be at least 3 inches from the edges to prevent cracking.
- **See appropriate documents for further details (cutting, drilling, bonding, sealing)**

ULTRACLEAR+ PANELS

ULTRACLEAR+ panels are designed to be either **back lit**** or **edge lit****

ULTRACLEAR+ panels are suitable for a wide variety of applications including feature walls, displays, signage and furniture

ULTRACLEAR+ panels are unlike any other decorative panel on the market and are made for maximum visual impact

- KEY FEATURES

- Highest rate of light transmission among all kinds of plastic sheets: 92-93%
- Half the weight of glass
- Superior anti-shatter performance: up to 18 times better than glass
- Impact strength is 10 times higher than that of glass
- UV resistant
- Oil, chemical, acid and alkali resistant

- PANELS SIZES

- Standard panel size: 4' x 8' (1.2m x 2.4m) / all dimensions are subject to a 3/16" tolerance
- Standard panel size: 4' x 4' (1.2m x 1.2m) / certain styles only**

- PANEL WEIGHT

5/16"	(8mm)	2.5lb/ft ²	(approx. 80lbs)*
7/16"	(11mm)	3lb/ft ²	(approx. 100lbs)*

- AVAILABLE COLORS/INTERLAYERS

- ULTRACLEAR+ panels are available in a wide variety of **organic or textile interlayers**
- Clients can request a different or custom interlayer (email sales@lumigraf.ca for details); minimums apply

- FINISHES

- Standard finish is **CLEAR/GLOSSY**
- LUMIGRAF can also apply a custom backing** onto ULTRACLEAR+ panels for back lit or edge lit applications

- PANEL COMPOSITION

- Poured PMMA resin and one or more of the following: Cotton, Silk, Natural Straw or foliage, Paper, Wood, Bamboo, Zircon, Stones etc.

- STORAGE

- ULTRACLEAR+ sheets should be fully supported across entire surface in a controlled environment free of direct sunlight, moisture, temperature extremes, and solvent vapors. It is best if stored in original packaging in panel racks that fully support the panel surface at 10° from vertical. Horizontal storage is acceptable for short periods if panels are clean and larger sized sheets are on the bottom to prevent overhang of any portion of the sheet.

- CLEANING

- Use warm water, mild soap or detergent, and a soft sponge, cloth, or chamois to clean ULTRACLEAR+ products
- Do not use glass cleaning products, acetone, gasoline, benzene, lacquer thinner, chlorinated solvents, gritty abrasive scouring compounds, or alkaline cleaners to clean ULTRACLEAR+ products
- **Do not use squeegees, scrapers, or synthetic rags that may scratch**

- FABRICATING

- See appropriate documents (cutting, drilling, bonding, sealing), visit our website for further details

C-THRU PANELS (semi-transparent panels)

LUMIGRAF'S C-THRU panels are available in **crisp, modern patterns**

C-THRU is also available in a full range of gauges and can be ordered as a **flexible translucent film for lighting design** or in panel form in both **acrylic** and **fire-rated "A" polycarbonate** (some color variation is to be expected with polycarbonate – please ask for sample before ordering)

- KEY FEATURES

- C-THRU can be easily customized with clients' own imaging (COI)**
- Available in flexible material (PETG), acrylic panel or fire-rated "A" polycarbonate panel
- Pairs well with CRYSTALLIZED "metallized" wall/furniture/vertical surface panels
- Compatible with many commonly used architectural hardware solutions
- Short production lead times, easy maintenance

- PANELS SIZES

- Standard panel size: 4' x 8' (1.2m x 2.4m), some gauges may also be available in 4' x 10' panels
- Available gauges:
 - **1/32" *** (flexible material for lighting design)
 - 1/16"
 - 1/8"
 - 3/16"
 - **1/4" *** (room partitions, door inserts, guardrails, lighting design, ceiling panels, etc...)
 - 3/8"

- PANEL WEIGHTS

▪ 1/32" (0.8mm)	PETG	0.2lb/ft ²	(approx. 6lbs)
▪ 1/16" (1.6mm)	ACRYLIC	0.4lb/ft ²	(approx. 12lbs)
	POLYCARBONATE	0.5lb/ft ²	(approx. 15lbs)
▪ 1/8" (3.2mm)	ACRYLIC	0.8lb/ft ²	(approx. 25lbs)
	POLYCARBONATE	0.9lb/ft ²	(approx. 30lbs)
▪ 3/16" (4.8mm)	ACRYLIC	1.1lb/ft ²	(approx. 35lbs)
	POLYCARBONATE	1.25lb/ft ²	(approx. 40lbs)
▪ 1/4" (6.2mm)	ACRYLIC	1.6lb/ft ²	(approx. 50lbs)
	POLYCARBONATE	1.72lb/ft ²	(approx. 55lbs)
▪ 3/8" (9.5mm)	ACRYLIC	2.35lb/ft ²	(approx. 75lbs)
	POLYCARBONATE	2.5lb/ft ²	(approx. 80lbs)

- STORAGE

- C-THRU+ panels should be stored in a controlled environment free of direct sunlight, moisture, temperature extremes, and solvent vapors. It is best if stored with protective film in place in panel racks that fully support the panel surface at 10° from vertical.
- **Horizontal storage is acceptable for short periods if panels are clean and dust free** as particles could imprint permanently onto the panel surface

- PANEL COMPOSITION

- PETG, Acrylic or Polycarbonate, Textured Vinyl, Optical Adhesive, ECO-Solvent Ink (Greenguard Certified), UV Resistant Clear Vinyl

- AVAILABLE COLORS/PATTERNS

- C-THRU Panels are currently available in White, Light Grey and Black. C-THRU Flex (1/32") is available in a wide range of Pantone™ colors** / Clients may submit own imaging (COI) in vector format**

*most popular gauges

C-THRU PANELS (semi-transparent panels) – cont'd

- FINISHES
 - Standard finish is **SATIN/GLOSSY in all gauges** – satin is a durable finish with a subtle texture
 - **SATIN/SATIN** finish is also available however some distortion is to be expected in the image on thicker gauges
 - **GLOSSY/GLOSSY** finish is also available
- CLEANING
 - Use a dampened soft sponge, cloth, or chamois to clean C-THRU panels. A gentle detergent such as dishwashing soap is recommended. Use detergent sparingly
 - Use a soft cloth to blot dry. Do not rub surface with dry cloth as it could scratch the surface
 - Do not use glass cleaning products, acetone, gasoline, benzene, lacquer thinner, chlorinated solvents, gritty abrasive scouring compounds, or alkaline cleaners to clean C-THRU+ panels
 - **Do not use squeegees, scrapers, or synthetic rags that may scratch**
- FABRICATING
 - C-THRU FILM (1/32") can be cut using a ruler and a sharp utility knife, scissors, or a cutting board
 - C-THRU ACRYLIC PANELS can be cut using a table saw and a 80+ tooth blade designed for plastic
 - Care should be taken when cutting C-THRU POLYCARBONATE PANELS as chipping may occur
 - **See appropriate documents for further details**

METALLIZED PANELS: Includes Crystallized / Reflexions / Galvanized / Rainbow (opaque panels)

LUMIGRAF'S metallized panels are unique to Lumigraf and are available four series, each of which features a different visual effect. Our metallized series panels are designed to be used on **vertical surfaces (walls, furniture, columns)** and can also be used on ceilings

METALLIZED panels are available in a full range of gauges and can be ordered in both **acrylic** and **fire-rated "A" polycarbonate** (some color variation may be visible with polycarbonate, esp. in lighter hues – please request sample before ordering)

- KEY FEATURES

- CRYSTALLIZED panels can be easily customized with clients' own imaging (COI)**
- CRYSTALLIZED panels pair well with C-THRU semi-transparent panels and film
- All metallized series are available in acrylic panels or fire-rated "A" polycarbonate panels
- Polycarbonate panels in 1/16" can be used on curved surfaces such as front desks**
- Short production lead times, easy maintenance, unique visual effect

- PANELS SIZES

- Standard panel size: 4' x 8' (1.2m x 2.4m), some gauges may also be available in 4' x 10' panels
- **IMPORTANT NOTE: Reflexions panels are 37" x 96"**
- Available gauges:
 - 1/16" *
 - 1/8" *
 - 3/16"
 - 1/4"
 - 3/8"

- PANEL WEIGHTS

1/16" (1.6mm)	ACRYLIC	0.4lb/ft ²	(approx. 13lbs)
	POLYCARBONATE	0.5lb/ft ²	(approx. 15lbs)
	REFLEXIONS	37" x 96"	(approx. 10lbs)
1/8" (3.2mm)	ACRYLIC	0.8lb/ft ²	(approx. 25lbs)
	POLYCARBONATE	0.9lb/ft ²	(approx. 30lbs)
	REFLEXIONS	37" x 96"	(approx. 20lbs)
3/16" (4.8mm)	ACRYLIC	1.1lb/ft ²	(approx. 35lbs)
	POLYCARBONATE	1.25lb/ft ²	(approx. 40lbs)
	REFLEXIONS	37" x 96"	(approx. 27lbs)
1/4" (6.2mm)	ACRYLIC	1.6lb/ft ²	(approx. 50lbs)
	POLYCARBONATE	1.72lb/ft ²	(approx. 55lbs)
	REFLEXIONS	37" x 96"	(approx. 42lbs)
3/8" (9.5mm)	ACRYLIC	2.35lb/ft ²	(approx. 75lbs)
	POLYCARBONATE	2.5lb/ft ²	(approx. 80lbs)
	REFLEXIONS	37" x 96"	(approx. 58lbs)

- STORAGE

- METALLIZED panels should be stored in a controlled environment free of direct sunlight, moisture, temperature extremes, and solvent vapors. It is best if stored with protective film in place in panel racks that fully support the panel surface at 10° from vertical.
- **Horizontal storage is acceptable for short periods if panels are clean and dust free** as particles could imprint permanently onto the back of the panels




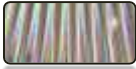
- PANEL COMPOSITION

- Acrylic or Fire Rated "A" Polycarbonate, Optical Adhesive, ECO-Solvent Ink (Greenguard Certified), UV Resistant Clear Vinyl, metallized polyester film, polycoated vinyl (backing)

*most popular gauges

METALLIZED PANELS: Includes Crystallized / Reflexions / Galvanized / Rainbow – cont'd

- METALLIZED STYLES (effect): Defines each collection, regardless of color or pattern

1. CRYSTALLIZED High Brilliance, angular look. Silver, gold or copper		2. GALVANIZED Low Brilliance. Similar to sheet metal Slight "industrial" look	
3. REFLEXIONS (37" X 96") Very High Brilliance, mirrored, 3-dimensional look		4. RAINBOW Linear + prismatic. Breaks white light into its elemental colors	

- AVAILABLE COLORS/PATTERNS
 - CRYSTALLIZED PANELS:**
 - Available in a variety of solid colors with choice of Silver, Gold or Copper toned metallized pattern. Clients can submit own image in vector format and/or Pantone™ color of their choice. Can be easily branded for retail/commercial applications**
 - GALVANIZED & REFLEXIONS PANELS**
 - Available in a wide variety of patterns and colors ranging from psychedelic tame. Most patterns were designed with 3D software. Colors cannot be customized (generally) however we can integrate corporate logos into existing patterns**
 - RAINBOW PANELS**
 - Available in two linear patterns. Bamboo (wide stripes) and Hot Chili (narrow stripes)
- FINISHES
 - Standard finish is **GLOSSY**
 - SATIN** finish is available in all metallized collections
 - All metallized panels are equipped with a protective backing**
- CLEANING
 - Use a dampened soft sponge, cloth, or chamois to clean panels. A gentle detergent such as dishwashing soap is recommended. Use detergent sparingly
 - Use a soft cloth to blot dry. Do not rub surface with dry cloth as it could scratch the surface
 - Do not use glass cleaning products, acetone, gasoline, benzene, lacquer thinner, chlorinated solvents, gritty abrasive scouring compounds, or alkaline cleaners to clean panels
 - Do not use squeegees, scrapers, or synthetic rags that may scratch**
- FABRICATING
 - METALLIZED ACRYLIC PANELS can be cut using a table saw equipped with a 80+ tooth blade designed for plastic at MINIMUM 3500 RPM
 - Care should be taken when cutting METALLIZED POLYCARBONATE PANELS as chipping may occur
 - Protective film must remain on front of panels while fabricating
 - Under no circumstances should the vinyl backing be removed
 - METALLIZED panels must be cut facing down
 - METALLIZED panels must be drilled from back to front
 - SURFACE onto which METALLIZED panels are being adhered must be perfectly smooth, dust free and without flaw
 - See appropriate technical documents for further details**

LUMI-ONYX AND TEXTURE-ALL PANELS (translucent panels for backlit applications)

LUMIGRAF'S Lumi-Onyx panels are unique to Lumigraf and are available in a wide variety of colors and patterns. Each **Lumi-Onyx** pattern was made using a high resolution drum scan of an actual piece of stone.

LUMI-ONYX is available in a **full range of gauges** and can be in both **acrylic** and **fire-rated "A" polycarbonate** (some color variation is to be expected with polycarbonate – please ask for sample before ordering)

KEY FEATURES

- Veining on LUMI-ONYX panels can follow from one panel to another (design fees apply)**
- LUMI-ONYX and TEXTURE-ALL panels are available in acrylic panels or fire-rated "A" polycarbonate (works well on curved surfaces)
- Short production lead times and easy maintenance

PANELS SIZES

- Standard panel size: 4' x 8' (1.2m x 2.4m), some gauges may also be available in 4' x 10' panels**
- Available gauges:
 - 1/16"
 - 1/8"
 - 3/16"
 - 1/4" *
 - 3/8" *

PANEL WEIGHTS

1/16"	(1.6mm)	ACRYLIC	0.4lb/ft ²	(approx. 12lbs)
		POLYCARBONATE	0.5lb/ft ²	(approx. 15lbs)
1/8"	(3.2mm)	ACRYLIC	0.8lb/ft ²	(approx. 25lbs)
		POLYCARBONATE	0.9lb/ft ²	(approx. 30lbs)
3/16"	(4.8mm)	ACRYLIC	1.1lb/ft ²	(approx. 35lbs)
		POLYCARBONATE	1.25lb/ft ²	(approx. 40lbs)
1/4"	(6.2mm)	ACRYLIC	1.6lb/ft ²	(approx. 50lbs)
		POLYCARBONATE	1.72lb/ft ²	(approx. 55lbs)
3/8"	(9.5mm)	ACRYLIC	2.35lb/ft ²	(approx. 75lbs)
		POLYCARBONATE	2.5lb/ft ²	(approx. 80lbs)

STORAGE

- LUMI-ONYX and TEXTURE-ALL panels should be stored in a controlled environment free of direct sunlight, moisture, temperature extremes, and solvent vapors. It is best if stored with protective film in place in panel racks that fully support the panel surface at 10° from vertical.
Horizontal storage is acceptable for short periods if panels are clean and dust free as particles could imprint permanently onto the back of the panels

PANEL COMPOSITION

- Acrylic or Fire Rated "A" Polycarbonate, Optical Adhesive, ECO-Solvent Ink (Greenguard Certified), UV Resistant Clear Vinyl, Polycoated vinyl (white translucent backing)

COLORS/PATTERNS

- See website for available colors/patterns

FINISHES

- Standard finish is **GLOSSY**
- **SATIN** finish is available in all LUMI-ONYX patterns

*most popular gauges

LUMI-ONYX AND TEXTURE-ALL PANELS (translucent panels for backlit applications) – cont'd

- **CLEANING**
 - Use a dampened soft sponge, cloth, or chamois to clean panels. A gentle detergent such as dishwashing soap is recommended. Use detergent sparingly
 - Use a soft cloth to blot dry. Do not rub surface with dry cloth as it could scratch the surface
 - Do not use glass cleaning products, acetone, gasoline, benzene, lacquer thinner, chlorinated solvents, gritty abrasive scouring compounds, or alkaline cleaners to clean panels
 - **Do not use squeegees, scrapers, or synthetic rags that may scratch**
- **FABRICATING**
 - LUMI-ONYX and TEXTURE-ALL ACRYLIC PANELS can be cut using a table saw and a 80+ tooth blade designed for plastic
 - Care should be taken when cutting LUMI-ONYX and TEXTURE-ALL POLYCARBONATE PANELS as chipping may occur
 - Protective film must remain on front of panels while fabricating
 - Under no circumstances should the translucent vinyl backing be removed
 - LUMI-ONYX and TEXTURE-ALL panels must be cut facing down
 - LUMI-ONYX and TEXTURE-ALL panels must be drilled from back to front
 - **See appropriate technical documents for further details**