

**ViviGraphix Graphica** laminated glass features precise graphic patterns that consist of one or more graphic interlayers, each in the color of your choice. Select from our standard palette or match any Pantone, Benjamin Moore, or Sherwin Williams color. Graphica patterns range from simple to complex, provide a sense of texture and depth, and give you countless ways to use graphic elements to tell a colorful design story.

## PRODUCT FEATURES

- Suitable for interior and exterior applications.
- Requires minimal maintenance: with decorative treatment inside the glass, rather than surface-applied, glass surfaces are easy to clean.
- Configurations include popular architectural glass thicknesses and types: tinted, annealed, heat strengthened, tempered, flat or curved.
- Products are manufactured to specification and provided cut to size and ready to install.

## MATERIAL DESCRIPTION

ViviGraphix Graphica glass is defined by three parameters that are key to product specification:

CONFIGURATION	INTERLAYER	FINISH
<p>Configuration refers to the amount of light transmitted—or not—through the glass. To a large extent, the glass configuration is determined by the end use of the glass.</p> <p>ViviGraphix Graphica is available in three configurations: Reflect, View, and LightPlane Panels.</p> <p>See page 2 for details.</p>	<p>Interlayers serve as the primary visual aspect of the glass.</p> <p>ViviGraphix Graphica interlayers are a combination of two elements: pattern + pattern color(s). Options include customizable standard patterns and custom colors.</p> <p>See page 3 for details.</p>	<p>Finishes define the surface appearance of your glass by providing different levels of diffusion, reflectivity, glare and optical distortion.</p> <p>ViviGraphix Graphica is available in two finishes: Standard and Pearlex+.</p> <p>See page 4 for details.</p>

## PRODUCTS & APPLICATIONS

ViviGraphix Graphica glass can be used in the F+S Systems listed below or specified as loose lites for custom applications.

F+S SYSTEMS	GLASS LITES
<ul style="list-style-type: none"> <li>• LEVELr Wall Panel &amp; Column System</li> <li>• LEVELe Wall Panel &amp; Column System</li> <li>• LEVELr Elevator Interiors</li> <li>• LEVELe Elevator Interiors</li> <li>• LEVELc-2000 Elevator Interiors</li> <li>• LightPlane Panels</li> </ul>	<p>Processing options include polished edges, tempering, notches, cutouts and pattern cuts. ViviGraphix Graphica can be specified in any size up to 60" x 120" (1524 mm x 3048 mm). Please contact us for information on larger custom sizes.</p> <p>ViviGraphix Graphica glass lites can be used with commonly available glass hardware components to address a wide range of glass mounting and installation scenarios. Please contact our project management team for help with your project-specific needs.</p>

## GLASS PROFILE



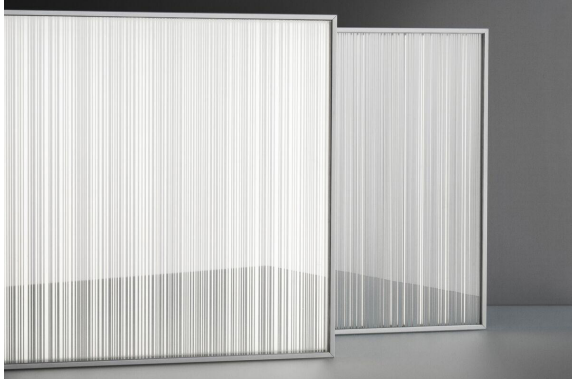
ViviGraphix Graphica glass can be made to fit a flat or curved profile. Curved profiles are subject to certain limitations. If a curved profile is needed, please contact us to discuss guidelines and documentation needed for specification.

## GLASS CHARACTERISTICS

FIRE RATING	SAFETY	ROUTINE MAINTENANCE
<p>ViviGlass is Class A fire rated in accordance with ASTM designation E84-09, standard test method of surface burning characteristics of building materials. The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.</p>	<p>VividGlass is available in annealed, tempered or heat strengthened glass. We recommend heat strengthening for glass over 50 square feet. Tempering is required for glass with holes and cutouts. For questions about glass strengthening and safety, please contact us.</p>	<p>VividGlass is a non-porous surface. It can be maintained using standard commercial, non-streaking cleaners and polishes formulated for use on glass. Additional details can be found on page 6 of this PDS and in the Architectural Materials Care &amp; Maintenance document on our website.</p>

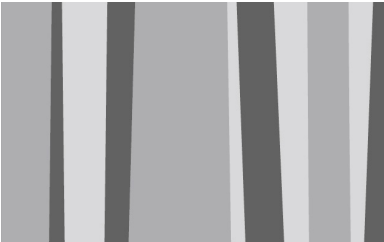
## CONFIGURATION OPTIONS

Configuration refers to the amount of light transmitted—or not—through the glass. To a large extent, the glass configuration is determined by the end use of the glass.

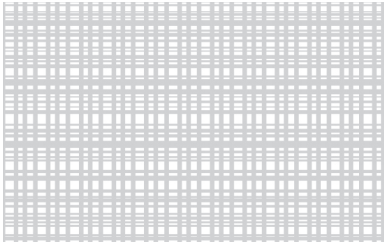
<p><b>REFLECT</b></p> 	<p><b>Reflect</b> is a single-sided configuration that consists of an interlayer between a transparent lite of glass and a reflective glass backer.</p> <p>Typical Applications: Reflect is ideal for applications where the glass will be installed against another surface, for example, in LEVELr, LEVELe and LEVELc-2000 Elevator Interiors, LEVELr and LEVELe Wall Panel &amp; Column Systems, or custom fabrications.</p> <p>(Configuration shown: ViviGraphix Graphica, Reflect, Cairo, White)</p>
<p><b>VIEW</b></p> 	<p><b>View</b> is a double-sided configuration that consists of an interlayer between two transparent lites of glass.</p> <p>Typical Applications: View is ideal for use in doors, partitions, room dividers and other applications where semi-privacy is desired and the glass is seen from both sides.</p> <p>(Configuration shown: ViviGraphix Graphica, View, Cairo, White)</p>
<p><b>LIGHTPLANE™ PANEL</b></p> 	<p><b>LightPlane</b> is a panelized edge-lit configuration. Panels consist of an extruded aluminum frame, LED lighting, and laminated glass inset.</p> <p>Typical Applications: LightPlane is ideal for applications where illuminated glass panels will be installed against another surface, for example, in LEVELe Elevator Interiors, LEVELe Wall Panel &amp; Column Systems, or as standalone LightPlane Panels.</p> <p>(Example shown: ViviGraphix Gleam glass, LightPlane configuration, Tempo II interlayer, Standard finish; LightPlane panel at left has illumination turned on; panel at right has illumination turned off)</p>

### GRAPHIC INTERLAYERS

ViviGraphix Graphica glass is available in the standard patterns shown. The patterns utilize two interlayers, each with its own color for added visual dimension. Interlayers can be specified in any Pantone, Benjamin Moore, or Sherwin Williams color. The different shades of grey in the swatches below indicate the different interlayers. For custom patterns, please provide artwork when specifying and contact us for details.



CAIRO



CENTENE



CURRENT



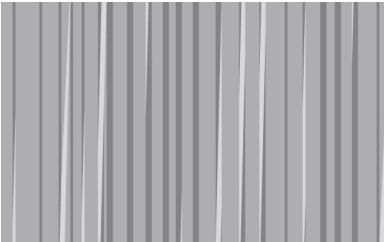
DRIFT



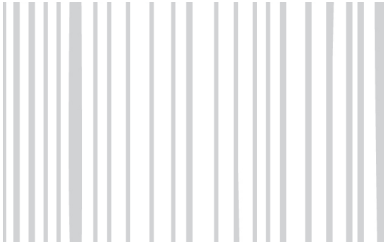
FROST



GLACIER







SEAGRASS



SILKWORM

## FINISH OPTIONS

Glass finishes define the surface appearance of your glass. As described below, the different options vary in levels of diffusion, reflectivity, glare, and optical distortion and provide different solutions for meeting individual project needs.

STANDARD		
		<p><b>Surface:</b> Smooth  <b>Diffusion:</b> None  <b>Reflectivity:</b> Reflective  <b>Glare:</b> High  <b>Optical distortion:</b> None  <b>Maintenance:</b> Easy to clean  <b>Durability:</b> Durable</p>
PEARLEX+™		
		<p><b>Surface:</b> Finely etched  <b>Diffusion:</b> Minimal  <b>Reflectivity:</b> Non-reflective  <b>Glare:</b> Minimal  <b>Optical distortion:</b> Minimal  <b>Maintenance:</b> Fingerprint resistant; exceptionally easy to clean  <b>Durability:</b> Highly durable; extremely scratch-resistant</p>

## APPLICABLE COMBINATIONS

VIVIGRAPHIX GRAPHICA	CONFIGURATION			GLASS FINISH			
	REFLECT	VIEW	LIGHTPLANE™	STANDARD	PEARLEX+™	OPALEX™	DIAMALEX™
CAIRO (H)	•	•	•	•	•		
CAIRO (V)	•	•	•	•	•		
CENTENE (H)	•	•	•	•	•		
CENTENE (V)	•	•	•	•	•		
CURRENT (H)	•	•	•	•	•		
CURRENT (V)	•	•	•	•	•		
DRIFT (H)	•	•	•	•	•		
DRIFT (V)	•	•	•	•	•		
FROST (H)	•	•	•	•	•		
FROST (V)	•	•	•	•	•		
GLACIER (H)	•	•	•	•	•		
GLACIER (V)	•	•	•	•	•		
SEAGRASS (H)	•	•	•	•	•		
SEAGRASS (V)	•	•	•	•	•		
SILKWORM (H)	•	•	•	•	•		
SILKWORM (V)	•	•	•	•	•		

## CUSTOM VIVIDGLASS

Forms+Surfaces is always willing to consider custom variations and modifications to meet specific project needs. Please contact us to discuss your requirements.

## ENVIRONMENTAL CONSIDERATIONS

Please refer to the VividGlass Product Environmental Data Sheet for detailed environmental impact information.

## HOW TO SPECIFY

A Design Guide is available to lead you through the specification process in a simple, checkbox format. The Design Guide captures all the information needed to generate a quote: configuration, finish, pattern, as well as other options.

## GLASS HANDLING GUIDELINES

<p><b>ORDERING</b></p> <ul style="list-style-type: none"> <li>Plan the order to avoid off-site storage and to minimize rehandling and time in storage at the job site before installation.</li> <li>Prepare boxing, trailer and floor loading schedules in consideration of weight limitations and handling and distribution needs.</li> </ul>
<p><b>RECEIVING</b></p> <ul style="list-style-type: none"> <li>VividGlass is sold and shipped on an F.O.B. FACTORY basis. Inspect all glass upon arrival.</li> <li>Before unloading, inspect handling equipment, rigging and surrounding conditions for safety compliance and inspect the general condition of the shipment for load shifting or possible damage in transit.</li> <li>Inspect the shipment for any shortage, abuse, wetness or other transit damage; note such on the bill of lading or delivery ticket and obtain the driver's signature as acknowledgment.</li> <li>Inventory received materials; immediately report any shortage to Forms+Surfaces and report concealed damage to the carrier.</li> <li>If necessary, file a written freight claim with the carrier and order replacement glass from Forms+Surfaces.</li> </ul>
<p><b>STORAGE</b></p> <ul style="list-style-type: none"> <li>Store indoors at moderate temperature (above the dew point).</li> <li>If outdoor storage is required, shade from direct sunlight and cover with tarp or plastic (for plastic, particularly, allow for air circulation in and around the cases—condensation can lead to glass surface staining).</li> <li>Support both sides of vertically stored cases.</li> <li>Wet glass must be towel dried prior to storage as prolonged moisture exposure can cause permanent surface staining.</li> </ul>
<p><b>HANDLING</b></p> <ul style="list-style-type: none"> <li>During handling, wear hard-hats, safety shoes, gloves, and glazing gauntlets and follow all established safety procedures.</li> <li>Remove the lid of the crate and unpack lite-by-lite; never end-pick glass or move partially unpacked cases.</li> <li>Exercise care to prevent damage to the glass; edge damage may lead to thermally associated glass breakage after installation.</li> <li>Cushion lites at bottom-edge quarter points on soft, firm blocks, free from glass chips, dirt or foreign matter.</li> <li>Stack glass on edge and lean against a structural column or other sturdy upright or rack at an angle of five to seven degrees from vertical; place interleaving between lites. Never slide one lite against another.</li> <li>Check finished surfaces and glass edges for damage before installation; set only acceptable material.</li> </ul>
<p><b>PROTECTION</b></p> <ul style="list-style-type: none"> <li>Install finished materials after potentially damaging construction activities nearby—such as welding, sandblasting and fireproofing—have been completed. If the construction schedule does not allow for this, protect the glazing from damage by other processes.</li> <li>Immediately after glass is set, identify the openings with streamers or ribbons suitably attached to the framing or surround and held free from the glass; do apply warning markers directly to the glass.</li> </ul>
<p><b>MAINTENANCE</b></p> <ul style="list-style-type: none"> <li>Shortly after glazing, remove grease or excess glazing materials by cleaning the glass with commercial solvents such as mineral spirits or naphtha, followed by a normal wash and rinse.</li> <li>Never use fluoride salts or hydrogen-fluoride producing compounds to wash the glass or surrounding surfaces; avoid use of razor blades or abrasive cleansers.</li> <li>Use soft, clean, grit-free cloths and a mild soap, detergent or slightly acidic solution for normal washing, rinse with clean water, and squeegee dry; ordinary commercial window-washing techniques are appropriate.</li> <li>Remove any stains from weathering steel by washing frequently during the weathering period (according to the steel manufacturer's recommendations).</li> <li>Remove any runoff from concrete, stucco or other alkaline materials by frequent window washing.</li> <li>Please refer to the Architectural Materials Care &amp; Maintenance document on our website for additional information.</li> </ul>