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DIGITAL PRINT ON GLASS

CERAMIC INK

VITROTERM - MURÓW S.A.

PRINTING ON GLASS HAS NEVER BEEN SO EFFECTIVE AND SIMPLE!

Digital prints on glass made by DIP-TECH printer open up a colorful world of computer images and graphics to customers, which were previously only available for printing on paper and film

Thanks to the fact that glass, after being printed with ceramic inks, is tempered, the graphics become resistant to weather conditions and UV radiation. This method does not require any additional work apart from processing the graphic file.

Six basic colors guarantee photographic quality prints with a resolution of up to 1000 dpi. Thanks to software that allows graphics to be divided for printing on adjacent glass panes, it is possible to obtain large-format images across the entire surface of the facade.

ADVANTAGES OF DIGITAL PRINTING:

- Photographic-quality colors and resolution up to 1000 dpi.
- Direct printing on glass without any preparatory work
- All inks are free of heavy metals
- Wide range of colors and possible multilayer printing
- The possibility and cost-effectiveness of producing a single glass pane with an individual print
- The glass is safe for the user and has higher resistance to cracking caused by thermal stress

The technology of digital ceramic printing, compared to other digital printers, uses different colors, so it is important to carefully select and prepare the graphics or image. Due to the lack of magenta, which production is highly toxic, it is difficult to achieve very intense and saturated colors. However, this means that there are no heavy metals, especially cadmium, in the inks used, making it a more environmentally friendly and healthy solution.

Primary colors

B G W O R K

Advantages of ceramic ink

- Durable and long-lasting when applied to glass.
- Resistant to UV radiation
- Resistant to scratches and wear
- Long-lasting color shine
- Free of heavy metals
- Environmentally safe

TECHNICAL SPECIFICATIONS

Raster graphics (photos)	PSD,PDF, EPS, TIFF, BMP, JPEG
Vector graphics	AI, PDF, EPS, CDR*, DXF, DWG, DWF
Fonts	Standard fonts (Arial, Calibri, Verdana, etc.) Special fonts converted to curves.
Resolution	from 72 dpi to 1000 dpi
Color space	RGB (recommended) CMYK (accepted)
Used color profile	BGWORK
Glass thickness	4-19 mm
Minimum glass size	200 x 300 mm
Maximum size of the glass	2445 x 5000 mm

* If your graphics were designed in COREL DRAW program, please save the CDR file in version 12.0 or in another format listed in the table.

Colors in digital ceramic printing cannot be compared with the CMYK system, as it is based on different primary colors

In ceramic digital printing technology, we have the ability to control transparency, create prints that change depending on the time of day and the type of lighting, and even create 3D prints. If you have any doubts about the graphics or design and are wondering if the results will meet your or your client's expectation we will always be happy to help, and if necessary, we will create a sample print for you.

Discover how diverse glass can be!

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Smartglass

Smartglass is a type of glass that allows for manipulation of the print depending on the time of day and type of lighting. The idea is that the printed black glass will reveal an image or pattern only when light is used behind it. It is suitable for applications that can be installed with rear lighting, such as wall coverings or between rooms, such as partition walls, doors, etc.Smartglass is a type of glass that allows for manipulation of the print depending on the time of day and type of lighting. The idea is that the printed black glass will reveal an image or pattern only when light is used behind it. It is suitable for applications that can be installed with rear lighting, such as wall coverings or between rooms, such as partition walls, doors, etc.

Gradients

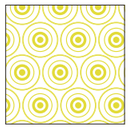
Thanks to digital printing technology, we can create any tonal transitions, also in the form of shapes such as dots, squares, lines, etc.

One Vision

If we want the image to be visible only on one side and reduce its transparency, we can apply an additional layer of a chosen color.

Double Vision

is an effect that allows you to achieve a double-sided image, for example, with a geometric pattern, the outer side can have a yellow color, and the inner side can have a green color. Keep in mind that the glass will be less transparent in this case.



outer side

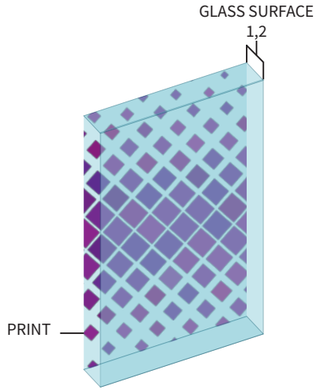
inner side

Glass with printing has a wide range of applications. Thanks to the fact that ceramic inks in the toughening process fuse with the glass, prints can withstand many years without depigmentation, even when exposed to extreme weather conditions. Glass with printing can be used both indoors and outdoors. Ceramic printing can be used in single glass, laminated glass, and insulated glass units.

The use of printed glass

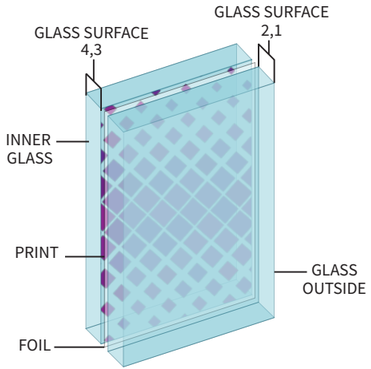
- facades
- balustrades
- glass buildings
- showcases
- partition walls
- balconies
- door
- windows
- stairs
- shower cabins
- wall tiles
- ceiling elements
- wall decorations, paintings
- glass plates
- tables
- fronts
- kitchen countertops
- kitchen panels

Single Glass



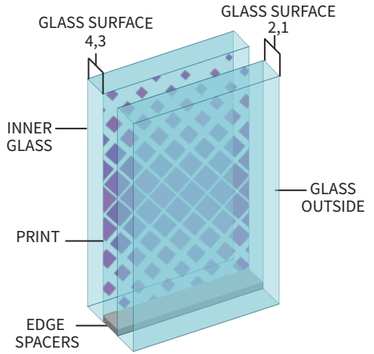
The coating with print is located in position number 2

Laminated Glass



In laminated glass, the ceramic coating can be applied in position number 2 or 3

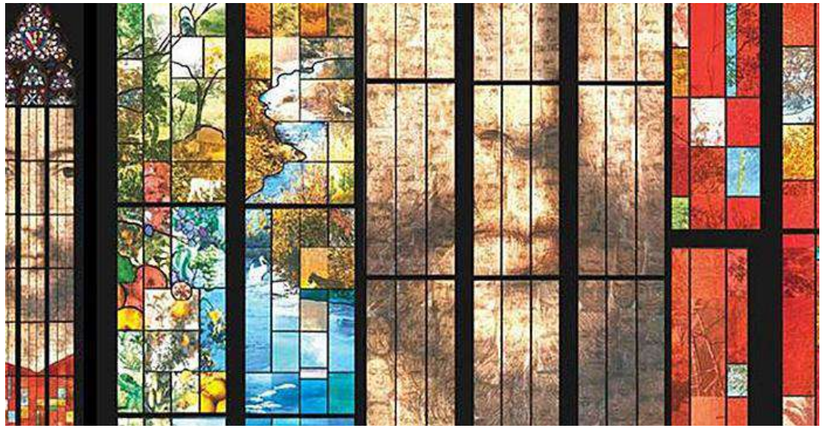
Insulated Glass



The ceramic layer can be applied in position number 2, 3, or 4* (*only from the inside)

! The ceramic layer should not be applied in position number 1

STAINED GLASS



A new perspective on the art of creating stained glass thanks to the use of modern technology of digital printing with ceramic inks
Modern designs, from public buildings to private homes, are now using ceramic digital printing technology on glass to create stunning and original stained glass windows of any size at a reasonable price. What was once a tedious process is now a solution that can be successfully used in countless architectural projects. Whether you're thinking of a detailed, geometric, or photorealistic pattern, glass printing allows you to achieve the desired effects

In the past, decorative colored glass was the domain of churches and other places of worship. Stained glass and colored glass are also present, although not to such a large extent, in museums and other public buildings. However, thanks to the technology of digital printing on glass, colorful stained glass patterns can be used in any type of building. In addition to the ability to create colorful images, digital ceramic printing on glass ensures incredible durability of stained glass, so that the work of art can withstand many years without depigmentation.

Ornamental glass with print

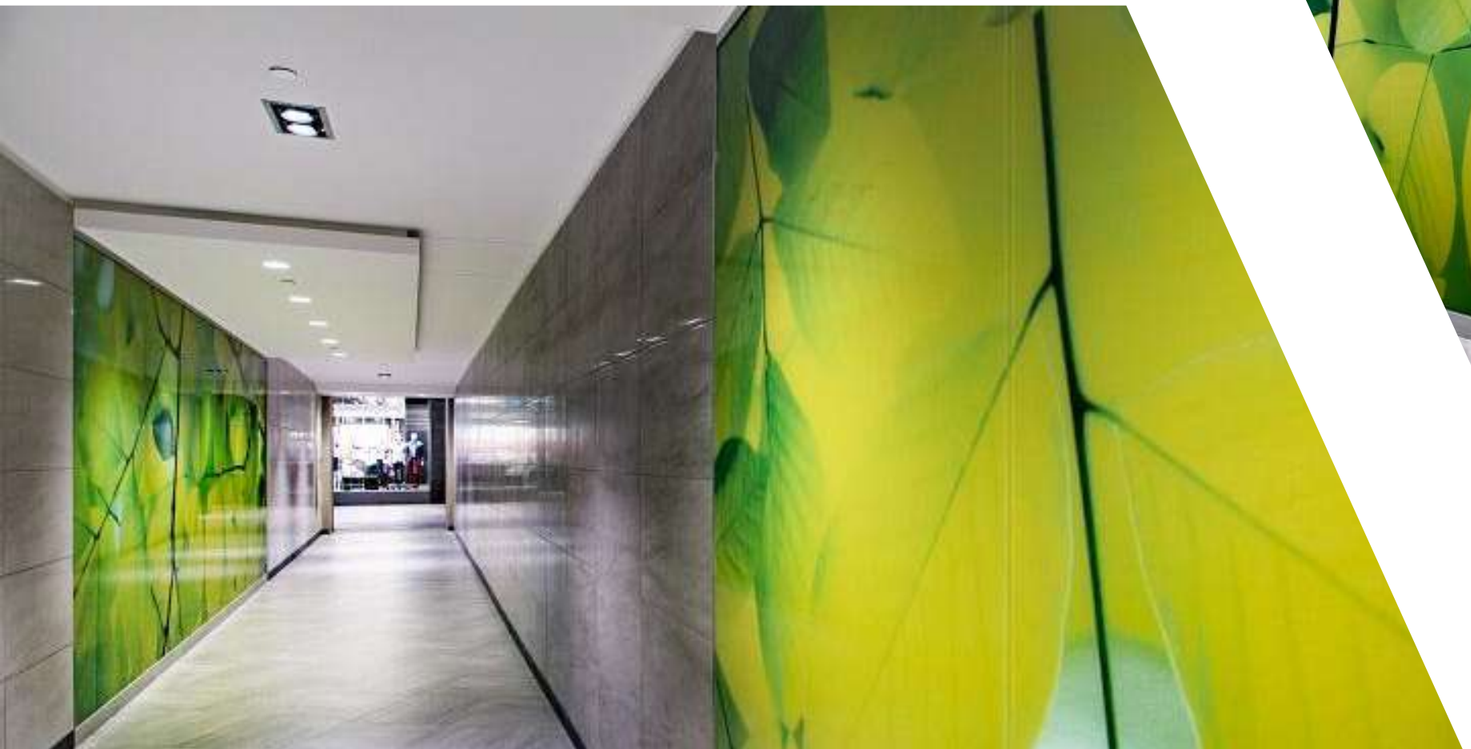
Ornamental glass is increasingly used in modern construction.
The main task of ornamental glass is to provide natural light to the room while increasing its warmth, while maintaining visual privacy. Ornamental glass can also be printed, which will give the printed image a unique appearance. The multitude of effects that can be achieved through this method is practically limitless

Imitation of sandblasting

Ceramic printing is also a great alternative to sandblasted glass

- The performance of glass with a sandblasted imitation is significantly faster and more profitable, even for single orders.
- There is no need to make templates, it is easy to clean and keep clean with ordinary glass cleaners
- There is no need to use special impregnants, and there is no discoloration, resulting in a perfectly smooth surface

Carrefour Laval
Canada



Architect and designer
GH+A Design Studio

Photographer
Sebastien
Forget Major

Glass Processor
Laurier

Harlem Hospital
New York

Architect and designer
HOK, New York

Photographer
Paul Warchol

Glass Processor
Alice®, GGI,
North America

Education Park Ezinge

Meppel

Architect
Atelier Pro

Designer
Driessen + van Dejine

Glass Processor
Thiele Glas

Photographer
Courtesy of Si-X
& Bert Kiers
Jean Paul Mioulet

Cardboard Cathedral

New Zeland

Architect and designer
Shigeru Ban Architects, Winner of Pritzker Prize 2014

Photographer
Bridgit Anderson

Glass Processor
Metro Performance Glass

Children's World - Toy Store

Russia

Architect
Mosproekt 2

Glass Processor
Russian Glass Company

Metro Stations

Denver, Colorado

Artist
Sandra Fettingis

Glass Processor
GGI