

FOREWORD:

The ARTISTIC SURFACES created by Alex Turco Art Designer are handmade coverings suitable for any location.

Our art panels are great for all environments in contact with water and moisture as well as outdoors and all atmospheric agents, even locations subject to extreme weather conditions. They are suitable for commercial as well as private spaces that could never host artworks and that have now become the focus of ambitious installations (wet areas, outdoor living, wall decorations, furniture and doors, counters and backsplash, elevators, ceilings, curved walls and columns).

In fact, this product maintains its characteristics of durability, impermeability and non-toxicity even under prolonged exposure to extreme weather conditions.

The art panel is manufactured by assembling three elements: A) pure aluminum or composite aluminum sheet + B) digital UV printing customized through graphics plus additional hand-made and artistic touches using acrylic paints and metal powders + C) a surface made of layers of transparent and waterproof bi-component epoxy resin.

SUPPORT:

Our artworks are made from a smart and versatile material produced by ALCOA, from which we use 3 different types:

- COMPOSITE ALUMINUM is a sandwich of two layers of aluminum and polyethylene in the core, which at thickness of 4 mm and is used for straight wall applications, showers and ceiling.
- PURE ALUMINUM is one mm thick and is what is suggested for curved wall applications, columns and furniture applications.
- BACKLIT ART PANEL is made with acrylic support with a thickness ranging from 2-8mm they are translucent and suitable for artificial back lighting (traditional or LED).

These supports are very light and workable materials: they are easy to mill, cut, bend, fold and silk-screen print.

The greatest value of these materials lies in its ability to accept digital printing directly on its surface with excellent results and has the following characteristics: it is suitable for use in buildings both outdoors and indoors; it is UV ray resistant; it is perfectly flat; it is incredibly light; it has good mechanical characteristics; it is completely soundproof (it does not resonate); it is easy to work with and it does not require any anti-static treatment.

The technical data of the support are as follows:

COMPOSITE ALUMINUM:

Thickness: 0.15" / 4 mm

Panel maximum size available:

6.5' x 10' in the USA

2000x4000 mm in Europe-Asia

Weight: 0.95 lb/ft² / 5 kg/m²

Thermal resistance: from -122°F to +176°F

from -50°C to +80°C

PURE ALUMINUM:

Thickness: 0.040" / 1 mm

Panel maximum size available: 4' x 8' in the USA

1 220x2440 mm in Europe/Asia

Weight: 0.56 lb/ft² / 5 kg/m²

Thermal resistance: from -122°F to +176°F

from -50°C to +80°C

BACKLIT:

Thickness: from 2mm/0.080" to 10mm/0.40"

Panel maximum size available: 6.5' x 10' in the USA / 2000x3000 mm in Europe/Asia

Weight: 0.56 lb/ft² / 5 kg/m²

Thermal resistance: from -122°F to +176°F /

from -50°C to +80°C

PRINTING AND COLORS USED:

The images chosen by the art designer are worked on using graphic design software tools and digital photo retouching effects.

The artistic result represents the basis on which the designer operates, first using acrylic colors through casting, brush and sponge, and then using metallic powders diluted in alcohol.

The uniqueness and value of these artworks arise specifically from the artistic/hand-made work performed on each individual plate.

The digital picture is transferred on the aluminum through an ink jet printer that uses liquid "UV curable" ink: The colors dry quickly thanks to the exposure to ultraviolet rays, which solidify and secure them to the support.

The printing technique is based on a CMYK (four colors) process. The range of colors is controlled through dedicated software and it features the full color spectrum.

The characteristics of the "UV curable" color printing process are the following: the LED lamps' UV ray frequency spectrum is non-harmful to health; the inks have very low emission of volatile organic components (VOCs); there are no toxic substances and color saturation is optimal.

FINISHING LAYER AND PROTECTION:

Plate protection and full waterproofing of the digital prints are performed manually by spreading a bi-component self-leveling EPOXY RESIN that is solvent-free and ready to use by simply mixing the base.

The client can choose between 2 types of finishing in order to have either a GLOSSY or a MATTE effect; both will protect the panel over time as well as consolidate the art layer underneath.

The main characteristics of this finishing are as follows: surface that does not yellow over time, that is waterproof, solvent-free and therefore non-toxic.

The panels are available in 5 different finishes: Flat, Moon, Brush Strokes, Bubbles and Minerals.

INSTALLATION:

The surface where the artwork will be installed must be flat and free of bumps, lumps, and relief. It is necessary to make sure that the surfaces to be glued are clean, dry and degreased. For gluing wood, wood moisture must not exceed 15%.

In the case of gluing on metals, the oxidized surface layers must be removed (through sanding and then washing using a degreasing solvent such as acetone). It is necessary to sand the fiberglass surfaces or very smooth surfaces with sandpaper.

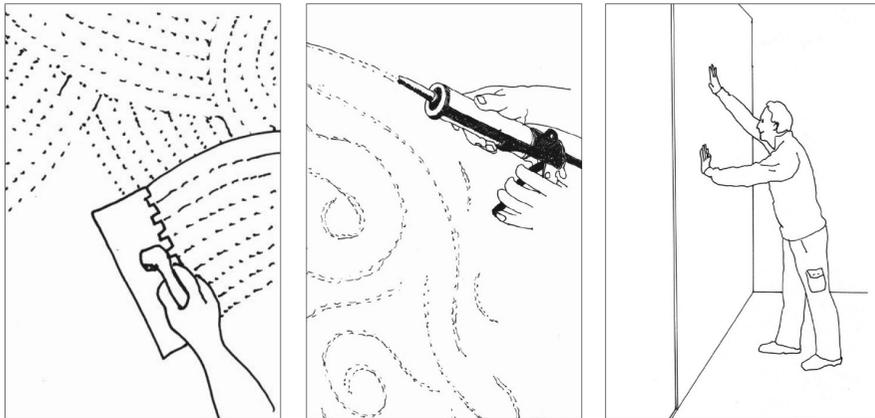
When used in moist locations with walls in plasterboard, gypsum plasters, cement plasters or marine plywood, we recommend first to waterproof the surface with an easy to find product, such as the WPS MAPEGUM by MAPEI or similar.

To glue the panels is necessary the use of skilled workers, such as tile, marble and mosaic professional installers. We suggest the use of single component polyurethane adhesive products that are both moisture and thermal stress resistant.

As a guideline, the use of a quality products suitable for this purpose and easily available in all countries are: Liquid Nails - Bostik - Trade Fix - Simson - Den Braven or KERALASTIC T flexible setting compound manufactured by MAPEI (in the USA market the product name is PLANICRETE W) or any equivalent.

The adhesive must be spread evenly on the wall using a toothed spatula.

The artwork can be applied locking it by applying pressure with the palm of the hand.



DRILLING AND ADJUSTING ON SITE:

The panels can be easily cut at the job site following these instructions:

- small and simple cuts can be done using a regular cutter; you will only need to trace a line then follow it with the blade a few times.

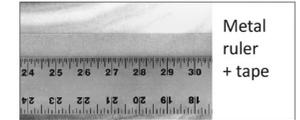
We normally advise the use of a professional metal ruler and blue tape to prevent scratching the resin on the panel (see picture).



Dremel
3000



Dremel
EZ Lock
Cutting
Kit



Metal
ruler
+ tape

Given the fact that the panels are made of a flexible material it will be easy to cut them as the pieces will separate after cutting by simply bending the 2 parts (see picture).



Panel
saw wall
system



Table
saw



Fine tooth
laminate
grade
blade

- bigger cuts can be done using professional machinery such as the CNC ROUTER-PANEL SAW WALL SYSTEM or even better using a TABLE SAW with a specific fine tooth laminate grade blade to prevent chipping of the resin.

We always advise to make all cuts on the back of the panels to prevent resin from chipping or peeling.

- for round cuts such as the ones needed to install shower fixtures or any other hole that needs to be made in order to install lights or pipes, we advise the use of a hole saw for metals or a regular drill that will allow you to make several small holes so that the resin will not chip or break (see picture).



Hole saw



Drill



Several
small
holes

MAINTENANCE AND CLEANING:

The surface of the panel does not require special maintenance.

The resin treatment makes the surface resistant to stress, wear and tear; however, for regular cleaning we recommend cleaning products that are free from abrasives substances in order to prevent surface scratching. There are many standard detergents on the market that are suitable for this use like Viakal, Jif, Viss or Cif Soft Cream or Bathroom mousse; also any glass product is ideal for daily cleaning.

We do not recommend the use of bleach and thinners.

To obtain a beautiful finish, we recommend using a microfiber cloth with spray cleaner Menzerna "Top Inspection", Meguiars "Final Touch".

After a couple of months, we recommend you to treat/process the panel with a wax or polish.

When polishing, we recommend you use two polishing compounds with a circular polisher in the following order: WHITE Meguiars Ultra-Cut Compound 105 or GRAY 3M 'Perfect It' Machine Polish 06064.