FOREWORD:

The **DECORATIVE ART PANELS** created by **Alex Turco Art Designer** are artistic coverings suitable for any location or environment.

Our panels are fantastic indoors as well as outdoors, as they can withstand water and moisture and almost any atmospheric agents, even locations subject to extreme weather conditions. They are ideal for commercial spaces. However, they can also work well in private spaces that would not otherwise be suitable for a large scale artworks. Now these spaces can become the focus of ambitious installations (wet areas, showers, 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)** composite aluminum or pure aluminum sheet + **B)** digital UV printing customized through graphics plus additional handmade and artistic touches using acrylic paints and metal powders + **C)** a surface made of layers of transparent and waterproof bi-component epoxy resin.

We do not recommend installing our panels as a stove backsplash as extreme heat and flames could damage them.

SUPPORT:

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

- **COMPOSITE ALUMINUM** which is made of two sheets of aluminum sandwiching a solid core of extruded thermoplastic material formed in a continuous process using no glues or adhesives between dissimilar materials.
(For a complete technical overview please visit reynobond.com)

- **PURE ALUMINUM** which is a flat sheet composed only of simple aluminum.
(For a complete technical overview please visit reynobond.com or reynolux.com)

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, as well as their key characteristics:
Suitable for use both indoors and outdoors; UV ray resistant; perfectly flat; incredibly light; completely soundproof (they do not resonate); easy to work with and requires no 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' x11' in the Americas / 2000 x 4000 mm in EU- Asia
Weight: 1 lbs x sq/ft / 5 kg x sq/mt
Thermal resistance:
From -122°F to +176°F / From -50°C to +80°C

COMPOSITE ALUMINUM MIRRORED BASE:
Panel maximum size available:
4' x10' in the Americas / 1220 x 3050 mm in EU- Asia

PURE ALUMINUM:
Thickness: 0.040" / 1 mm
Panel maximum size available:
3' x10' in the Americas / 1000 x 3050 mm in EU- Asia
Weight: 0,40 lbs x sq/ft / 2 kg x sq/mt
Thermal resistance:
From -122°F to +176°F / From -50°C to +80°C

ACRYLIC CLEAR PANEL:
Thickness: 2 mm -10 mm
Panel maximum size available:
6.5' x10' in the Americas / 2000 x 3050 mm in EU- Asia
Weight: 2 lbs x sq/ft / 10 kg x sq/mt

ACRYLIC OPALINE PANEL:
Thickness: 2 mm -10 mm
Panel maximum size available:
6.5' x10' in the Americas / 2000 x 3050 mm in EU- Asia
Weight: 2 lbs x sq/ft / 10 kg x sq/mt

PRINTING AND COLORS USED:

The images chosen by the art designer are re-worked 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 handmade 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 which 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.

Component A: solid epoxy resin of bisphenol A and epichlorohydrin, liquid novolac epoxy of bisphenol F and epichlorohydrin.
Component B: catalyst (cycloaliphatic polyamines) which provides effective protection and high resistance to aggressive chemicals, acids, bases, oils, and grease.

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, is waterproof, solvent-free and therefore non-toxic.

Moreover, other than the **FLAT** finish it is possible to have **MOON, BRUSH STROKES, BUBBLES, RAIN,** or **MINERALS** finish where natural elements (sands, crystals and minerals) are integrated during the process for additional textural and visual elements.

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 waterproofing the surface with an easy to find product, such as the **WPS MAPEGUM** by **MAPEI** or similar
The data sheet can be downloaded from this link: www.mapei.com/public/COM/products/2014_mapegum%20wps_gb.pdf.
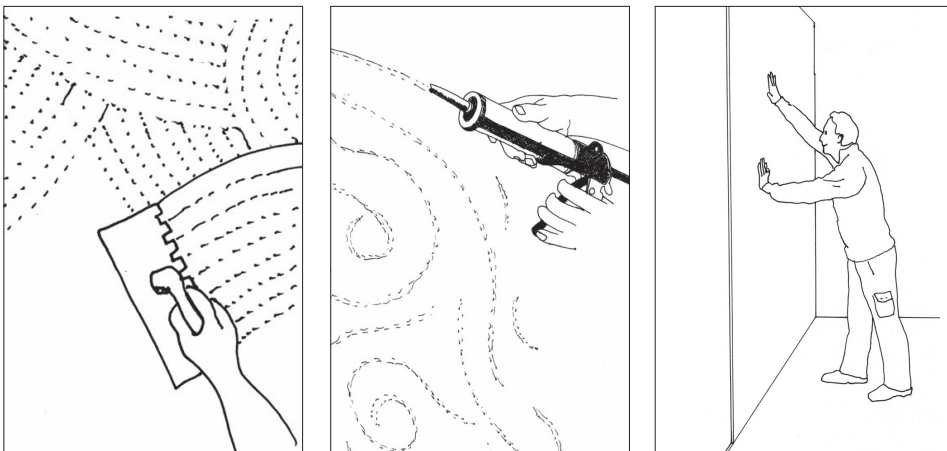
Skilled installers are necessary in order to mount the panels. We recommend professional tile, marble and mosaic installers. We suggest the use of single component polyurethane adhesive products that are both moisture and thermal stress resistant.

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 data sheet can be downloaded from this link: www.mapei.com/public/COM/products/122_keralastic_gb.pdf.

The adhesive must be spread evenly on the wall using a toothed spatula.
(see the picture)

The artwork can be applied and locked in place by applying pressure with the palm of the hand.
(see the picture)

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

- **Small and simple cuts** can be done using a variable-speed rotary tool ("**Dremel 3000**" suggested) with Metal cutting disc ("**Dremel EZ Lock Cutting kit**" suggested); you will only need to trace a line then follow it with metal cutting disc mounted on the rotary tool, then sand it with sandpaper (grit 100) to clean the cut.
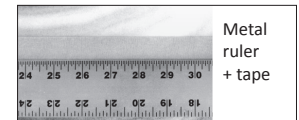We normally advise the use a professional **metal ruler** and masking tape in order to prevent scratches on the epoxy resin on the panel.

Dremel 3000	Dremel EZ Lock Cutting Kit	Metal ruler + tape

- **Bigger cuts** can be done using professional machinery such as the **CNC ROUTER-PANEL SAW WALL SYSTEM.** Better yet is to use a **TABLE SAW** with a specific **fine tooth laminate grade blade** to prevent chipping the resin.
We always advise to make all cuts on the back of the panels to prevent resin from chipping or peeling.

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Panel saw wall system	Table saw	Fine tooth laminate grade blade

- **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.

Hole saw	Drill	Several small holes
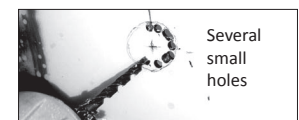
The surface of the panel does not require special maintenance.
The resin treatment makes the surface resistant to stress, wear and tear; however, for regular cleaning we recommend cleaning products that are free from abrasives substances in order to prevent surface scratching. There are many standard detergents on the market that are suitable for this use such as 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 or thinners of any kind.
To obtain a beautiful finish, we recommend using a microfiber cloth with spray cleaner such as **Menzerna Top Inspection**, or **Meguiars Final Touch.**
After a couple of months, we recommend treating the panel with a wax or polish.
When polishing, we recommend you use two polishing compounds with a circular polisher in the following order: **Meguiars Ultra-Cut Compound 105** or **3M "Perfect It" Machine Polish 06064.**