ColorSet Composites

The new benchmark in durable graphic panels for signage, environmental graphics & decorative surfaces

The Future is Here

www.colorsetcomposites.com
The creation of sustainable signage products is for our planet and the people who inhabit it. With its sustainability plan in printing practices and manufacturing operations ColorSet Composites moves forward in our dedication and obligation to environmental responsibility.

-Team ColorSet

We are dedicated to sustainable manufacturing in the creation of our manufactured signage through economically-sound processes that minimize negative environmental impacts while conserving energy and natural resources. With the predictions and the resources, we are building for the future as we believe every family business should today.

About Us

Innovation isn’t about good luck, innovation is about discovering and creating new products that meet customer needs while piloting a sustainable pathway and a clean technology. Innovation moves the future forward. We have re-invented signage towards a more resource-efficient and low-carbon economy.

ColorSet Composites is a family-owned business based in Las Vegas. Within the past five years, Tom Hicks, joined the company and brought an inspired set of concepts to innovate the outdoor signage industry. Tom and Todd Koren share a common goal of creating an end product that is resilient, durable, with a prolonged existence while maintaining a sustainable strategy for manufacturing
DuraSet Graphic Panels

DuraSet Graphic Panels are full color, structural panels made by combining our patented process and traditional composite resins and materials with a focus on eliminating VOC’s and other harmful chemistry. We have formulated the best woven and non-woven reinforcement materials for the most strength and durability possible for each panel thickness. ½” and ¾” thick panels are produced using a lightweight core material making these panels much lighter and easier to ship while still being the most durable panels available today.

BioSet Graphic Panels

BioSet Graphic Panels are produced by combining our patented technology and rapidly renewable and recycled materials. Our BioSet panels use flax fiber reinforcement and resin with up to 53% of bio-sourced content. These resins have the same physical properties, UV & chemical resistance compared to conventional resins. This resin provides a carbon footprint (CO2 emissions) up to 30% less than traditional resins. Additionally, our technology and production method does not require high heat and pressure which greatly reduces energy consumption compared to traditional methods. A Life Cycle Assessment (LCA) has been performed on the use of our bio-resin with flax fibers for a lounge seat application. Results show -31% of the greenhouse gases (GHG) emissions compared to standard resin with glass fibers.

COLORSET PANELS

All ColorSet Composite graphic panel products are produced with our patented composite color infusion technology. Composite panels are simply a reinforcement material that has had resin transferred, infused, compressed or impregnated in and around it. Traditionally graphics have been printed on paper or some other carrier sheet which is coated with clear resin and compressed into the laminate composite. Our graphics aren’t printed on paper or any type of carrier sheet. In fact, we eliminate layers all together so that there are no layers that can delaminate or cause warping. This eliminates graphic distortion and loss of color as well so you will get incredible color and print resolution. By formulating and mixing our resins in house there are many benefits that result with this patented process. The flexibility of resin formulation allows:

- Elimination of layers which in turn removes warping and delamination and creates a hydrophobic panel that can be used in wet environments and even submerged for zoo and aquarium graphics
- Energy Conservation: Our graphic infusion process dramatically reduces energy consumption as high pressure and heat is not required
- Reusable texture plates and panel molds eliminate consumables and waste
- In-house mixing and formulation of resins allow us to emphasize graffiti and UV resistance, weatherability and exclusion of VOC’s and formaldehyde
- Bio-Set composite panels: Environmentally sustainable graphic panels - Bio-resin and rapidly renewable reinforcement
- Durability to exceed a 10 -year warranty
Reducing Energy Usage: our process uses the heat energy caused by the chemical reaction in our formula. An exothermic reaction naturally occurs when two resin components are combined during infusion and that heat initiates the curing of the graphic resin during infusion. We use a low energy vacuum to aid in the infusion unlike the “High” pressures and heat energy.

**HOW IT WORKS**

Polyurethane base UV thermoset ink is digitally printed onto custom formulated B-stage (uncured) thermoset polyurethane resin that has been coated onto reusable textured casting release film. The printed B-stage film is placed in a panel mold with recycled fillers and reinforcement. Bio-based urethane resin is infused into the mold via Vacuum Assisted Resin Transfer (VARTM).

The infusion resin and the printed B-stage polyurethane film combine creating a monolithic resin panel. The exothermic reaction of the infusion resin generates heat-approaching 270°F (130°C) which starts the curing process. A heated table continues heating the mold at the same temperature after the exothermic reaction to post cure the panel insuring maximum cure.

**Customer Services**

No two projects are ever identical. Clients come to us with a variety of needs and in many different stages of the purchase process. Some projects are still in the abstract – no more than a concept, some need those final tweaks, while others are prepared and ready to move forward. Every project involves a different level of assistance, skill, and attentiveness. We can meet client expectations with a variety of services.
ColorSet Composites is committed to environmental responsibility and sustainability. To do so we have developed patented technology over a five-year period. This is where we compete in the marketplace and why our technology was developed. Our practices are both good common sense, as well as good business.