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AWARDS & ENGRAVING | PRINTWEAR | SIGN & DIGITAL GRAPHICS

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# GP+

## LASER ENGRAVING



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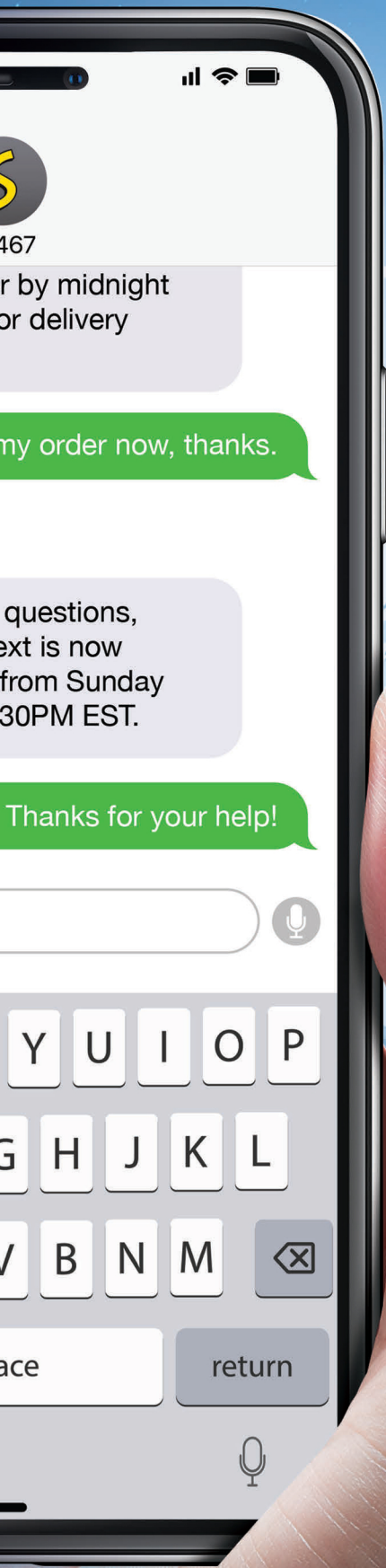
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**ON THE COVER:** Metropolitan West of Long Beach, California, has been figuring out ways to reimagine spaces from floor to ceiling, Page 22. Image courtesy of Metropolitan West. Bottom right: This month's GP+ is all about laser engraving. Image courtesy of Xtreme! Marketing.

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# Time to Trim Down



Matt Dixon is the former executive editor of GRAPHICS PRO magazine. He can be reached at [jmatthewdixon@gmail.com](mailto:jmatthewdixon@gmail.com).

Nobody likes to think about their business not succeeding in the ways that they want, but unfortunately for many, there comes a time to pull the plug on certain market segments or maybe even the whole business. Or perhaps you have just reached that time in your life when you want to pull back and focus on less work and more fishing.

Downsizing a business can be a difficult and sensitive process, but it is sometimes necessary for financial stability or strategic realignment. Here are some best practices to consider when downsizing a business:

## Start with a well-defined plan:

- Clearly outline the reasons for downsizing, such as cost reduction, changing market conditions, or strategic shifts. For example, perhaps you've even developed a partnership with a company down the street that can print banners faster and cheaper than you because of their equipment and it just doesn't make sense to keep that service in-house.

- Set specific goals and objectives, like reducing expenses by a certain percentage or refocusing the business on core activities.

## Communicate transparently:

- Maintain open and honest communication with employees, customers, suppliers, and other stakeholders.

- Explain the reasons for downsizing and the expected impact on various aspects of the business.

## Find a home for that equipment

- Just because the plan didn't work out for you doesn't mean someone out there can't make good use of that equipment you've already paid for. The landfill should be your last resort.

## Retain key talent:

- Identify and retain critical employees whose skills and knowledge are essential for the business's success.

## Streamline operations:

- Evaluate and optimize business processes and workflows to eliminate inefficiencies.
- Automate tasks and reduce redundancy wherever possible.

## Maintain customer relationships:

- Ensure that downsizing doesn't negatively impact customer service or relationships. You never know if that former customer will come back around as a new customer for your next endeavor. Relationships are hard to create and easy to destroy.

- Communicate with customers to reassure them of your commitment to their needs.

## Focus on core products or services:

- Concentrate on the products or services that are most profitable and align with your long-term strategy.
- Consider divesting non-core assets or business units.

## Financial management:

- Ensure that your financial management is sound during the downsizing process and maintain tight control over cash flow.

Downsizing will almost always be a difficult process, and it's hard to feel that there can be any successful way to do it. The way you handle downsizing can have a significant impact on your business's reputation as well as your personal reputation and future success, so approach it with empathy and a focus on long-term sustainability.

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# Floor Graphics Tips & Techniques

An in-depth look at floor graphics, from creation to completion **BY CHRIS RODKEY**



Chris Rodkey is the president of Vinylbomb and has over 20 years of experience and in-depth knowledge of printing, fabrication, and color profiling. Vinylbomb is known for tackling the “strange and unusual”.

Vinylbomb offers in-house grand format printing, fabrication, painting, and installation for high-end retail display and exhibitions.

As a young print enthusiast, some of my earliest obsessions with graphic arts were at the local supermarket. While walking through with my parents, it was attention-grabbing floor graphics that captivated me. Different colorful promotions and advertisements could be found in each aisle.

Floor graphics were traditionally printed (offset or screen print) in larger quantities for advertising campaigns. With the evolution of digital printers, floor graphics have become more common. Now they can be found just about anywhere.

Most of us tend to look where we walk, creating prime real estate for advertising. Why not run promotions in that space? Especially now with smartphones, everyone tends to be busy looking down while in line at supermarkets and other big box retail stores.

Floor graphics are a great opportunity for advertisers to be noticed while other forms of advertising could be ignored. In my opinion, of all the advertising mediums, floor graphics are the most impactful when done right.

## On the inside

Indoor floor graphics are by far the most common and cost-effective. They can be found in retail and grocery stores, museums, events, and other spaces. The base film must be matched with the corresponding non-skid overlaminates.

When selecting a floor graphic to keep on the shelf, find a multi-use vinyl that can be used for different applications. Minimizing the stock on the shelf will keep money in your pocket. A good film like 3M 40C will cover an array of floor

surfaces including tile, sealed concrete, terrazzo, ceramic, and low-pile carpet. It can also be used for window, wall, and spot vehicle graphics as well.

## The great outdoors

Outdoor floor graphics are more expensive and commonly used for advertising and wayfinding at events. They are short term and typically rated for up to three months.

Outdoor floor graphic applications are more demanding than indoor. They are intended to bond on unsealed concrete, brick or pavement. They have a thicker adhesive and a tougher non-skid laminate to withstand the added foot traffic and the elements they are exposed to.

## Floor graphics that do not require laminate

There are a few flavors of no-laminate-required floor graphics on the market. They can be more expensive than a combination of base and lamination for certain applications. The benefit is they can fill a specific niche that a combination floor graphic cannot.

A product made by Jessup called Asphalt Art is a unique foil-based film that is textured and considered non-skid without the use of a laminate. It can withstand both outdoor foot and vehicle traffic. This product would work great for sidewalk and street messaging in parades, for example.

This film is highly conformable to surfaces such as asphalt, concrete, stairs, stone and brick. The result is a convincing painted-on effect.

Outdoor floor graphics are typically very



Different floor graphics used for social distancing during COVID. Photos courtesy Vinylbomb.



Durable outdoor floor graphic lamination used on playing fields for a custom Mario Kart roll-a-ball game.

thick and cannot be die cut with standard equipment. Asphalt Art, for example, has foil in the construction of the film to make it durable. This will not work with print-cut workflows that utilize a standard vinyl cutter with optical registration.

If you are going to accept a job make sure there are no die cuts unless you have a CNC with a drag knife. The one downfall of not using laminate is the graphic can rub off from abusive foot traffic before the material withstands its usable life.

### Matching lamination for the base film

Typically, there are long-term (12-month) and short-term (3-month) combinations available for floor graphics. Usually, the base is the same, but the laminate determines the lifespan of the floor graphic.

Please check with your supplier what is suitable for the life expectancy of the customer's requirements. Trying to cheap out and go with the thinner lamination for a longer-term application will only make you look bad in the long run. Also, a quick tip to help graphics last longer is to avoid square corners. You should add a radius to them wherever possible.



Rounded corners have less of a chance of being damaged. Sharp corners cut in the floor graphic are more susceptible to edge lifting in the corners. This can turn into a tripping hazard and shorten the life of the floor graphic.

### Slip resistance certifications

With two-part floor graphics the non-skid certification will be assigned to the lamination, not the base. With 1-part floor graphic systems, the non-skid certification will be applied to the base since there is no lamination.

The following are standards set by UL, ASTM and ANSI/NFSI. Keep in mind the certifications mean different things. For example, if you are producing floor graphics for a dance floor, you do not want a material that will give traction to a car driving across it. People would break their ankles dancing when doing the twist by Chubby Checker or whatever the kids are doing nowadays. Finding the suitable skid resistance will help in figuring out which application it best suits.

UL 410 Standard for Slip Resistance of Floor Surface Materials is useful for



Conformable Asphalt Art utilized on concrete risers at Princeton University.

evaluating slip resistance on virtually all walkway surfaces and finishes. Slip resistance is critical to demonstrating that flooring products are effective as well as safe for occupants so they can avoid potentially dangerous slips and falls or other mishaps.

Manufacturers who achieve the UL 410 certification can label products with the UL certification mark, signaling to decision-makers that their product has been tested and certified by a respected, credible third party. This provides a notable competitive advantage over other products in the marketplace. (Source: [www.ul.com](http://www.ul.com)).

ASTM D-2047: With more than a half-century of consistently predictable and accurate testing results behind it, the ASTM D2047 standard continues to be the go-to standard for the floor polish industry, including their manufacturers, material suppliers and all users of floor polish.

D2047 is unique among slip standards in that it provides a compliance criterion for whether a tested polish film will provide a safe walkway surface and whether the term “slip resistant” can be applied to a polish. (Source: [sn.astm.org](http://sn.astm.org))

ANSI/NFSI B101.1-2022 outlines a test method, including the procedures and devices used for both laboratory and field-testing, to measure the SCOF of hard-surface walkways. In meeting this need, the standard addresses common hard-surfaced walkway materials, such as ceramic and porcelain tile, polished and unpolished concrete, stone, vinyl, wood and synthetic laminates, and such materials with coatings or polishes applied. It does not, however, apply to carpeting of any type. (Source: <https://blog.ansi.org/>)

ANSI/NFSI B101.3 specifies the procedures and devices used for both laboratory and field-testing to measure the wet dynamic coefficient of friction (DCOF) of hard-surface walkways. This standard

provides a measurement procedure setting forth DCOF ranges which facilitate remediation of walkway surfaces when warranted.

The test method addresses the common hard-surfaced walkway materials, such as ceramic and porcelain tile, polished and un-polished concrete, stone, vinyl, wood and synthetic laminates, and such materials with coatings or polishes applied. (Source: <https://blog.ansi.org/>)

### Ink limits on floor graphic base

When printing the floor graphic base, it is important to make sure you do not exceed the recommended ink limits of the base film being used. 3M 40C, for example, recommends a total ink limit of 250%. When customers use canned profiles they can easily exceed these limits.

If the film is oversaturated with ink it will not dry properly before laminating. As time goes on the ink will permeate through the vinyl and attack the adhesive,



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An example of using rounded corners to extend the usable life of the floor graphic.

separating it from the base film. This can also cause excessive shrinkage or curl-back. Even worse, when the film is removed the adhesive could separate from the base and stay on the surface. This will be labor intensive to remove or costly to replace.

### Seaming larger floor graphics

I have seen this done both ways. With a standard 1" overlap and with a butt seam. 3M recommends a butt seam should be used for multiple panels that have to be put together for a larger graphic. 3M states: "Overlapped seams are not recommended or warranted."

If a butt seam is required, it should be pre-cut in the shop before the graphics are packed for install. To cut a butt seam the graphics should be overlapped on the table with the backer on. Both panels should be taped down to the table securely with perfect registration to one another.

In the middle of the overlap and cut should be made through both panels at the same time. This will ensure perfect registration of the panels to one another without any gaps between the butt seam. If you try to cut the panels individually with a ruler you will be sure to have unsightly gaps between the panels when installed. The ruler and your eye are not straight enough to achieve this. It could be okay, but not as good when you cut them together like I mentioned.

### Wax and floor graphics

What makes a good teacher? Success and failure of your own and learning from others' successes and failures. Developing relationships and talking shop with others in the industry makes you more knowledgeable. These relationships will allow you to keep and make more money. Being humble and recognizing failure will prevent you

from making the same mistake twice.

Sometimes it is the installer's fault, but not as much as they are typically blamed. There was an experience I had dealing with a large high-end department store. They had a flower show and a huge yellow brick road floor graphic was intended to be the walkway guiding customers through the show.

The yellow brick road had plenty of curves die cut into it. When the installer laid about 30 feet of the winding road he noticed the first 10 feet began to lift from the floor.

The polished concrete floor had a fresh coat of wax applied before the show. The problem was it was applied on top of multiple layers of old wax. It was so thick the adhesive vinyl was separating the wax and lifting it from the floor. It seemed like the floor had never been stripped prior to putting layer after layer of fresh wax on.

## What makes a good teacher? Success and failure of your own and learning from others' successes and failures.

I went to assess the problem on-site. I took a fresh piece of material there and applied it to the floor.

When I snapped up the vinyl it removed about .060 of wax that immediately came up with the vinyl. There was to some degree a bit of tension from the graphic being applied in curves, but nothing could have anticipated the thick wax separating from itself.

When I supply floor graphics, I make it a point to note the floor should be stripped of wax before applying the vinyl. Due to the rush, a site survey was not performed. It was an odd situation I have never seen before or after that project.

To avoid this, a snap test with the material you plan on using can be performed to confirm the floor finish is securely bonded to the floor surface. If wax is separating from the floor it would be a job to pass on.

### Floor surfaces to possibly pass on

I typically deal with a lot of brokers and consultants. When we are asked to quote a floor graphic a game of *guess who* has to be played. They are typically supplied with limited information when the floor graphic is requested from their customer.

I request answers to the following questions: Is it indoors or outdoors? What type of floor is it? How long is it expected to last? Do you have photos of the area the graphics are being applied to?

If I ever hear "marble or varnished wood" I immediately pass on the project. I have heard horror stories of varnish being damaged on wood floors. Marble is another one. It is a porous stone that can actually drink the adhesive and stain over time.

Standard floor types advertised for floor graphics use are tile, vinyl, linoleum, terrazzo, sealed concrete, and ceramic floors.

Marble and hardwood floors are not typically mentioned as they can easily be damaged if the wrong vinyl is used. There are specific niche products designed for them, but if left on too long could still potentially damage the wood or marble surfaces much easier than your standard flooring that was mentioned earlier.

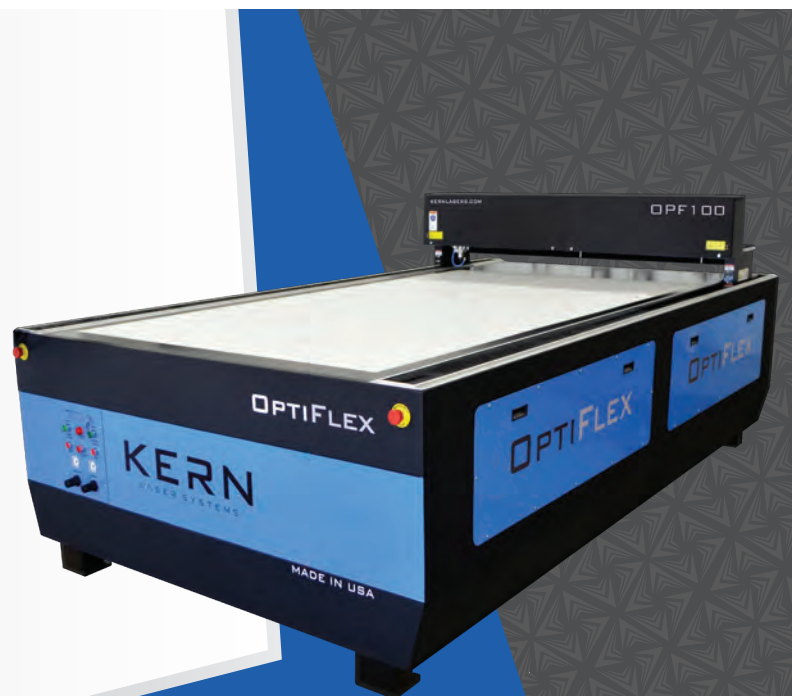
### Shipping

Because of the thicker laminates used with floor graphics it is important to roll them graphic out on a 6" core and then box. This is a recommendation from print manufacturers that I feel is overlooked. This prevents the liner from coming off the vinyl graphic that would create tunnels during shipping and transfer to the install. Tunneling is typically a result of rolling them on a 3" core or rolling them too tight to put in a core or box for shipping. GP



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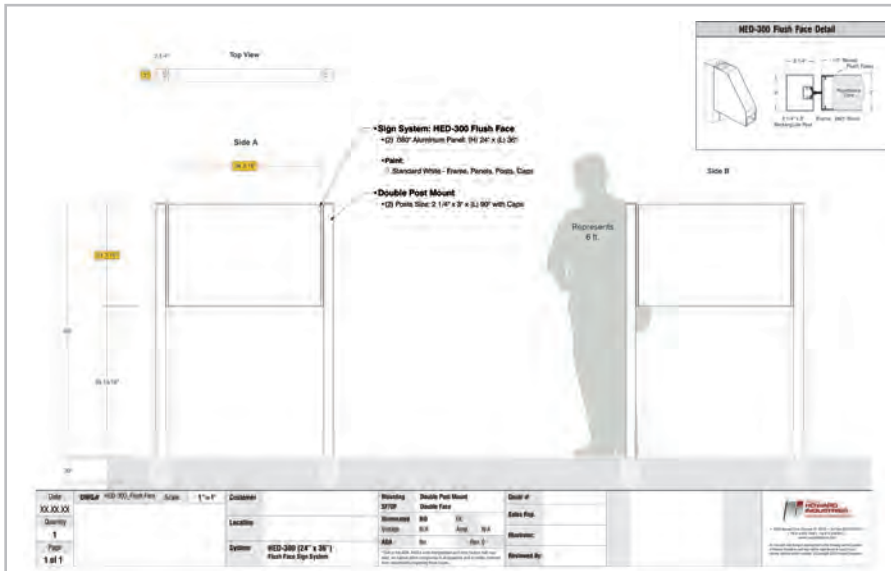
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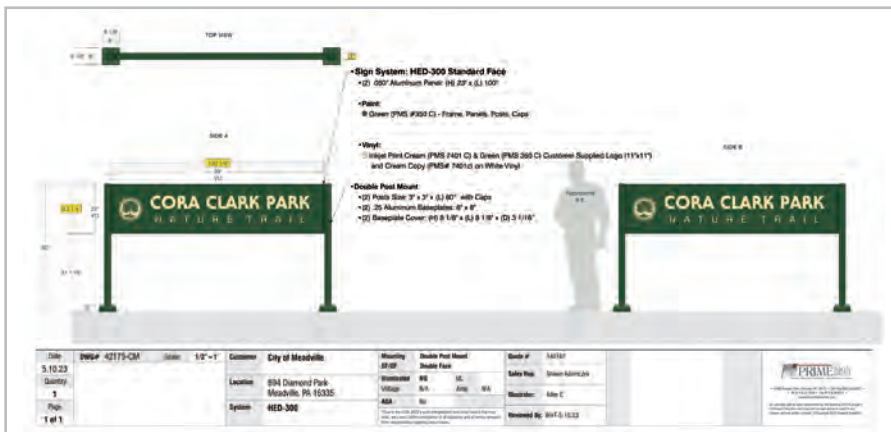
# Wholesale Exterior Signage

BY JD HAMILTON

*To sub or not to sub and how to test the waters*



Drawing template of Howard Industries' HED-300 post-and-panel product. Howard Industries can provide templates and cut-away/cross-section drawings for all their standard sizes and custom sizes upon request. (Drawing courtesy Howard Industries)



Complete turnkey post-and-panel projects painted to specifications and supplied graphics are great option provided by Howard Industries. (Drawing courtesy Howard Industries)



James Dean Hamilton has more than 30 years of experience in the sign industry with a vast knowledge of everything signage, marketing, and workflow management. His website is [www.jamesdean130.com](http://www.jamesdean130.com) and he can be reached at [JD@jamesdeanjd.com](mailto:JD@jamesdeanjd.com).

There comes a time for any graphics-oriented business to break out of its comfort zone and try something new or stay the course of the tried and true. Businesses on a fast growth track or in areas where that business has become a one-stop graphics shop have to eventually explore the opportunities available with the many wholesale options for signage available today.

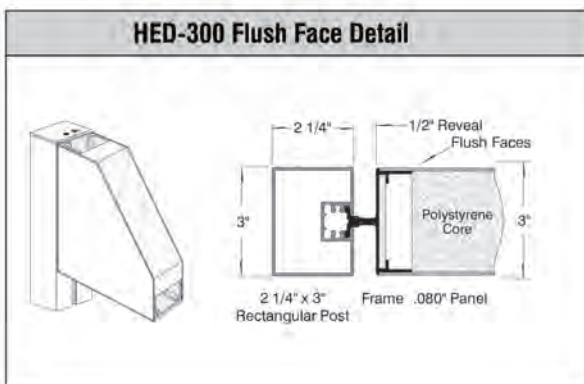
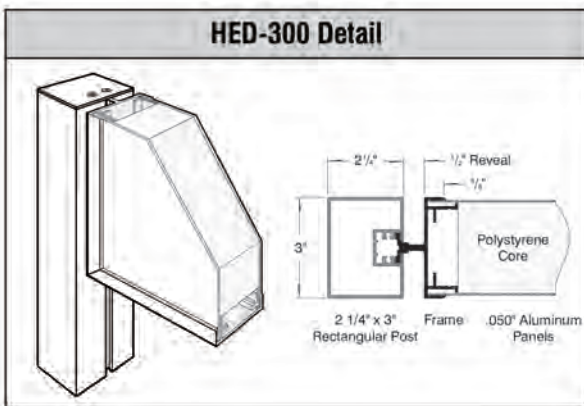
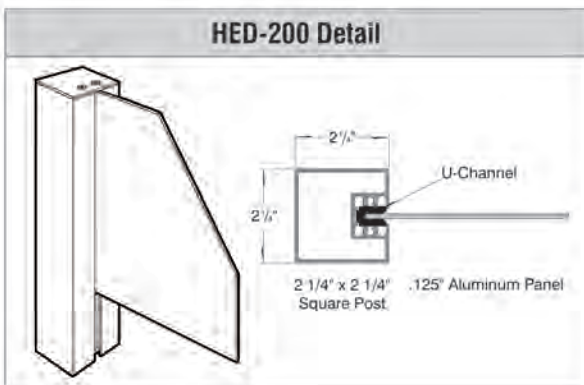
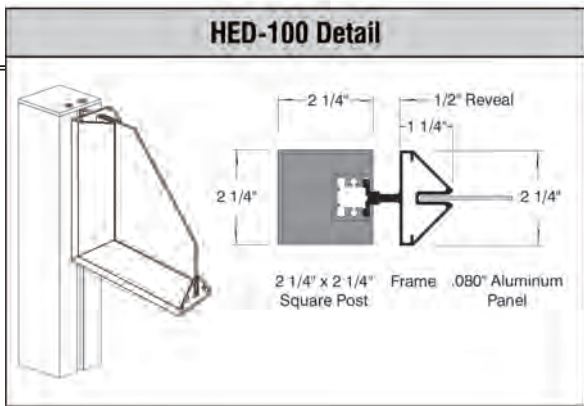
When it comes to sign business today, "It's not your father's Oldsmobile (or vinyl plotter)," as the saying goes. And times they are a changin'. We see it and embrace it with technology, new equipment and materials, and even social media.

For a lot of people, myself included, when starting and growing a business I wanted to have control. There, I said it out loud. My shrink would be proud. It took a lot of research, hand holding, and bottom-line accounting to break out of my business niche of work completed strictly in-house and navigate the wholesale possibilities.

Thankfully, the wholesale industry has also changed. Not only is virtually every signage product imaginable available by a wholesaler, but in today's world these organizations offer much more than just product.

In order to take the leap of faith, it involves mutual collaboration for the shop to gain a certain comfort level. Remember, these companies also follow the same 80/20 rule of business as the rest of us, so it's understandable they want the experience to be positive, profitable, and prompt so you return as a repeat customer.

So let's dispel the myth that wholesalers are the cut-throat used-car salesman of the



Technical drawings of Howard Industries' popular post-and-panel construction. (Drawings courtesy Howard Industries)



A great example of the value of a post-and-panel system with interchangeable directory panels. You can provide all the graphics or have the wholesaler provide it complete. (Photo courtesy Howard Industries)



Photo of a completed post-and-panel system comprised of extruded aluminum posts with matching panel-mounting hardware for the custom panel. (Photo courtesy Howard Industries)

past (when they actually sold Oldsmobiles). We all want the same win-win outcome for a project. For that to happen successfully, we need to understand the process, educate ourselves on what to provide, and just like we do for our clients, *manage our expectations*.

With any custom project that comes through the shop, clients are looking for what I refer to as the *Big Three*: Quality, Price, and Time (QPT). An industry friend told me early on: "You can have two out of the three; but not all three." If you want it quick and cheap, you are going to sacrifice quality. If you want high quality in a timely manner, it will cost you. Looking for high quality with a reasonable price? Prepare for it to take some time. The same should be expected from a good wholesaler.

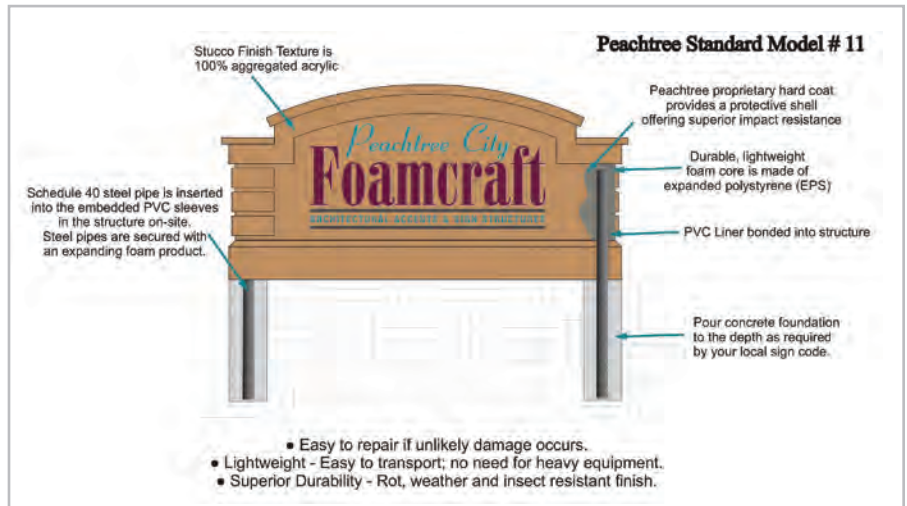
**Permit me to introduce myself**

This article focuses on exterior signage. I'd like to begin by prefacing that every contact I spoke with wished to convey one thing loud and clear... know what permitting in your municipality allows for signage!



Examples of grounds signage for wayfinding for both foot and vehicle traffic. Matching posts, color-matched automotive-quality paint, and consistent graphics help create a memorable and branded wayfinding experience. (Photos courtesy Howard Industries)

Components from the ground sign system can be incorporated in other sign types on a project like these wall and parking signs. Keep posts and frames as necessary to fit the sign standards. (Photos courtesy Howard Industries)



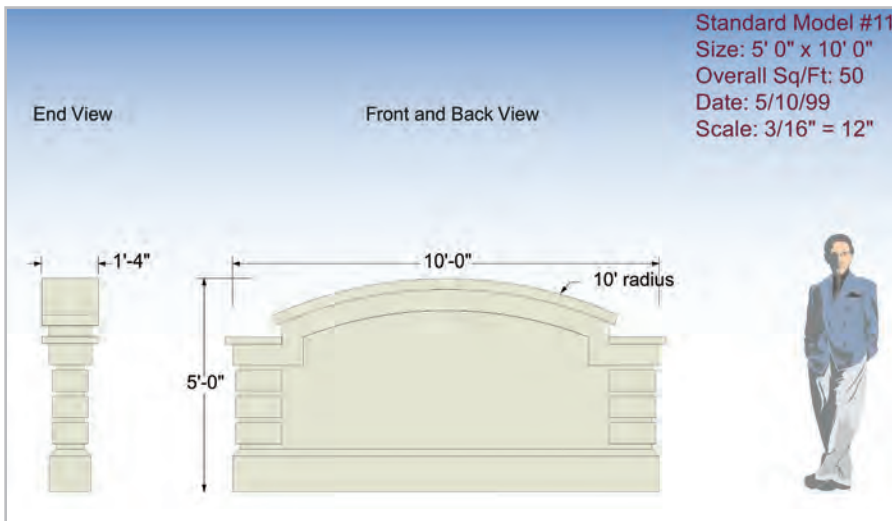
Drawing of Peachtree City Foamcraft's Standard Model #11 detailing construction. The size and detail can initially appear monumental, but the concept is simple and user friendly to install. (Drawing courtesy of Peachtree City Foamcraft)

Permitting is a whole topic in and of itself, but it is imperative to check on this before discussing exterior signage. For free-standing signs, this means finding out the square footage allowed, the total out-of-ground height, and how far set back from right-of-way the sign can be.

Let's begin with non-illuminated products. Most shops would be familiar with large industry wholesale companies like Gemini for flat cut and cast letters and logos in a variety of materials. But when it comes to a dimensional sign monument/cabinet or post-and-panel systems, there are quite a few options by several manufacturers.

Depending on how involved and capable your shop is, there are wholesalers that can provide turnkey products or kits. Mostly composed of extruded aluminum components, wholesalers have the stock and equipment to cut, miter, and pre-fit those extrusions in standard or custom sizes.

These kits can be provided in a mil finish or custom painted with an exterior automotive-quality paint you can specify with a PMS color or standard color chart provided by the company. Faces are usually made of a sheet of aluminum (thickness determined by the size of the cabinet). Kits are usually broken down for shipping and require minimal work to assemble at



Standard model templates can be easily imported into any design program, enabling you to create your own scaled drawing for permitting and client sign-off. (Drawing courtesy Peachtree City Foamcraft)



Finished photo of a completed standard model custom painted with faux brick columns. Graphics are individual letters and branding panels are stud-mounted into the monument using the same techniques as installing on a wall. (Photo courtesy Peachtree City Foamcraft)



Another example of a standard model with a custom-carved HDU panel. Projects can be monument-only or the product can be delivered complete and ready to install. (Photo courtesy Peachtree City Foamcraft)



Custom contemporary monument with stone finish. (Photo courtesy Peachtree City Foamcraft)

your shop, probably as simple as assembling Ikea furniture.

With these products they are often decorated and lettered with vinyl that you can do on your own in-house or ask that the product be delivered already complete with either vinyl or masked and painted graphics. Depending on your skill and comfort level, you have options.

### Post and panels, wealth, and taste

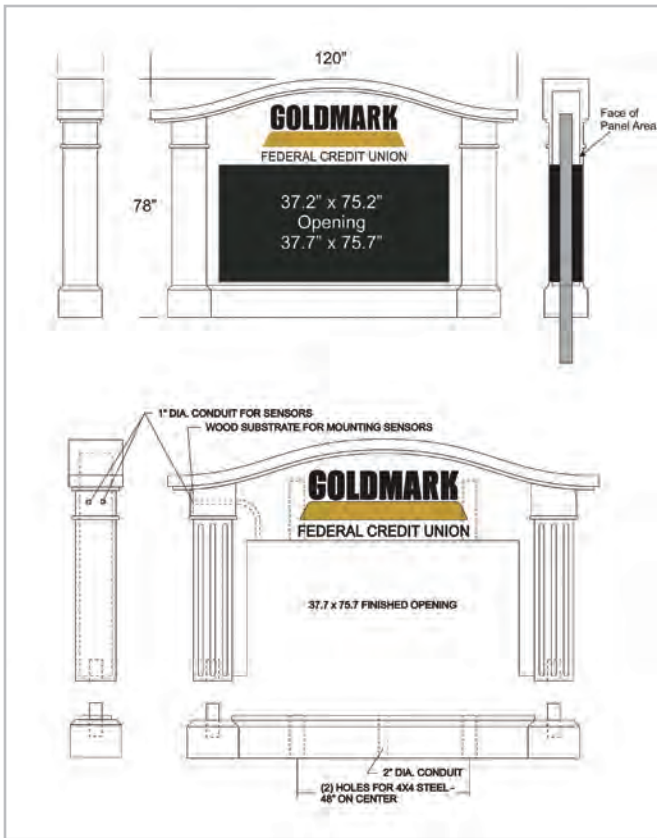
I spoke with Jen Miazga with Howard Industries in Erie, Pennsylvania about her company's post-and-panel systems: "Howard Industries has always been known for providing high quality

extruded aluminum post-and-panel sign systems; today we not only provide an extensive selection of that core product, but we have enhanced our internally illuminated cabinets and custom signage abilities, while creating our own interior sign system." Miazga says. "Our core business is providing our exterior sign systems, complete with painted posts, hardware, and panels to our sign industry clients where they can either apply their own graphics or have the option to purchase a complete sign with graphics ready to install."

These non-illuminated products are the perfect stepping stone for those new to

navigating the wholesale industry. There is a large market for permanent non-illuminated sign identification and wayfinding for businesses and schools, hospitals, and municipalities, just to name a few potential client groups. It gives you the opportunity to keep a standard of sign types for a project with similar extruded posts, panels, and painted colors. You control the graphics (usually cut or printed vinyl) or let the wholesaler hand it off ready to go.

"At Howard, we are able to help someone new to this type of signage with detailed drawings and specifications, and decades of experience with a staff that is ready to help," Miazga says. "We have found our



A custom monument illustrating construction components and detailing how an electronic message center (EMC) can be incorporated into the monuments. (Drawing courtesy Peachtree City Foamcraft)



Completion photo of custom monument housing an EMC unit. (Photo courtesy Peachtree City Foamcraft)



Example of another custom monument system with an EMC unit. This features a custom-matched faux brick and a custom-carved HDU sign. (Photo courtesy Peachtree City Foamcraft)

product templates and technical drawings can be very beneficial for our clients that need that for customer sign-offs or permitting purposes.”

Turn-around on wholesalers that offer standard post-and-panel systems is usually very expedient. Most will stock inventory of the specialty extruded aluminum posts and panel hardware. It just needs to be cut to size, prepped, and painted. That is the beauty of working within the standards of product types in your initial drawings to your client. Throw anything outside the standards and be aware that will add costs and time for the custom work.

These product types on smaller wayfinding signs can usually be packed and sent with standard ground shipping. Larger sizes will come via freight.

### Monumental opportunities

Foam monument systems offer another turnkey alternative to providing clients with identification signage that is a lot simpler than you would expect. I spoke with Mike Fetter, sales and marketing

director at Peachtree City Foamcraft with locations outside of Philadelphia, Las Vegas, and Atlanta.

“Our three locations allow us to service the entire continental United States as quickly and freight-friendly as possible,” Fetter says. “Our monuments offer sign companies large and small a product that can compete directly with fully constructed masonry projects at an economic price point.”

The foam monuments made of encapsulated polystyrene (EPS) have come a long way over the years and are available in a variety of standard and custom configurations. These products are typically produced by hot wire cutting large billets of EPS foam that are glued together and the entire exterior of the foam is coated in a hardcoat finish that protects and encapsulates the foam structure from the effects of freeze-thaw, mechanical impact, and abrasion.

“Having been manufacturing monuments for over 30 years we have seen exponential improvements in polymers.

Today, our proprietary Poly-Armor finish is extremely durable and allows us to maintain detailed carvings and shapes. Our final finish is a robust Master Wall exterior product available in a fine stucco texture. It is available in dozens of standard colors as well as custom color formulations,” Fetter says.

The monuments have embedded PVC post sleeves, and to install them galvanized steel posts can be purchased locally or supplied. These posts are slid into the larger PVC post sleeves and are held into place with expanding high-density urethane (HDU) foam at the time of installation.

Most monuments involve hand-digging two to three post holes, a bit of concrete, and two to three people to guide, level, and plumb the structure. An experienced sign installer will find these a breeze to work with and novices will enjoy the simplicity of installing what looks like a ton of bricks!

Over the years, Peachtree City Foamcraft has added custom stone, wood, and other



Monuments can even be used to create on-campus/facility wayfinding systems (Photo courtesy Peachtree City Foamcraft)



architectural elements to address the ever-evolving requests of environmental and signage designers. Fetter adds, “We started with just a few basic monument models with a stucco finish. We still do a good deal of those monuments. We have been given regular challenges to provide something different and today we can reproduce nearly any type of stone, architectural embellishment, or even create faux wood. Many of our initial customers start with a project utilizing one of our standard models. Once they are comfortable with the product, our process, and capabilities, their imagination takes over. Customers can provide their own graphics or sign panels or we can provide an absolute turnkey product ready to install. By adding internal support framing we can even have electronic message centers (EMCs) installed in our monuments. For people new to selling these products, I always ask them to contact a local mason or contractor to build an actual brick-and-mortar structure; once you see those costs and time frames involved the value of this product really begins to shine.”

Peachtree offers a large volume of support materials for permitting and installation, as well as detailed drawings for its customers. Samples are available upon request so you can show your client the durability of this unique product.

Product is crated with a full frame and wrapped in clear shipping plastic. It is easily surveyed upon receiving for any shipping damage. These products always come freight; if you don't have a shipping



Examples of custom contemporary monuments with custom stone finishes and illuminated and non-illuminated signage. (Photo courtesy Peachtree City Foamcraft)

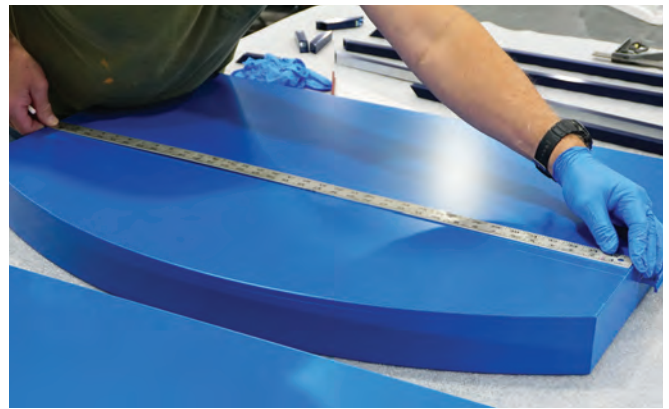


It's not all monuments at Peachtree. Here are some architectural and themed examples of unique signage. (Photo courtesy Peachtree City Foamcraft)





Architectural signage is often constructed of aluminum. Illuminated acrylic and LEDs are also combined. It takes a team of skilled craftsmen to fabricate with lots of specialized equipment. It's no wonder why small and large sign and graphics companies often defer to specialized wholesalers for this type of work. (Photos courtesy Howard Industries)



Not every shop can paint (nor wants to paint). Wholesale shops not only paint, but they have a quality staff and use high-end automotive-quality paints and finishes. (Photos courtesy Howard Industries)

dock you can arrange delivery with a short truck and a lift gate.

Most monuments weigh around 250 to 350 lbs. with the crate, so unloading and loading for install is manageable with a couple strong shop hands. According to Fetter, most monuments require four to eight weeks to produce after final approval.

### Sympathy for the details

For electric, custom-fabricated cabinets and channel letters there is another tier of wholesalers that can provide that. These products are almost always provided turn-key and ready to install. There are plenty of good reasons for that.

Keep in mind that over 90% of new signage when illuminated internally is LED and running low voltage. However, since

these signs are exterior and require a permit, the wholesaler needs to be UL or MET certified and in a growing number of municipalities. The sign will require a visible tag with the referenced UL or MET number, manufacturer, and phone number. You can always add your own local calling card next to it, but by code it may have to be there.

We all know that puppy-dog-eye client that comes into our shop not knowing a thing about graphics and layouts. They look to us as their consultant to deliver a quality product. Good wholesalers are going to do the same for you once the process and relationship is started.

To begin, it's important to get the right information over to the wholesaler as clearly and specifically as possible. Just like that client that brings in that

pixelated logo their nephew drew up for their business, the old adage remains *garbage in — garbage out*.

Start by sending clear drawings. At the very least, send your artwork as a vectored PDF so it can be reviewed from the wholesaler's fabrication perspective. Did I mention vector artwork? Most of this custom work is going to be produced by CNC machinery and that always follows vector lines.

I visited Brian Lawton at Diversified Signs and Graphics in York, South Carolina. Diversified is a large wholesale operation that provides architectural signage and installation services for companies in the industry as well as established sign brokers.

"You would be surprised at the number of requests for job quotations with

*The lion's share of this type of sign work is new construction, so a lot of coordination is needed with owners and their general contractor.*

artwork supplied that is so pixelated you'd be embarrassed to print it out on your desktop printer. It is so important to view the artwork in vector format so we can review the art for machining down the line. Sometimes art will need to be slightly altered. For example, a certain stroke width on a font is necessary to embed LEDs in a channel letter," Lawton says. "Hand in hand with good artwork comes a good understanding of sign codes to determine what is allowed, how large, and who is responsible for handling any final electrical connections. For the latter, we suggest to our customers that the client provide their electrician to do that. Some installers are qualified to make that connection but be aware some communities require a licensed electrician to do that connection. Do not underestimate the permitting and electrical work involved in this type of sign work. Once we have addressed those issues up front, we are ready to explore a variety of sign types and construction and begin getting together quotes to review."

Diversified Signs offers virtually every type of custom architectural sign type for monuments, wall mounted signs, and channel letters.

"Our business is a good mix of established sign companies and brokers that know exactly what they want and newer small to medium sized sign companies that are breaking into the architectural sign market. For the latter, we have years of experience and our team is well versed in helping educate customers on what is needed and what to expect in the process. With so many options available today, we can quickly make suggestions to nail the desired look on a high-end project or value engineer others that may involve multiple locations. It's a good idea up front if our customers are proactive with their clients to set realistic expectations of budget, look, and time frames," Lawton explains.

The lion's share of this type of sign work is new construction, so a lot of coordination is needed with owners and their general contractor. You are providing the sign but the final client needs to understand there may be coordination involved in

running dedicated electrical lines or possible building permits for the foundations of some architectural monuments.

There are a lot of unknowns during new construction, and it becomes a very fluid environment working behind other supporting trades before the signage goes in. The more you are aware of this and upfront with your client the better the chance of having a flawless experience that will make you want to do more.

The second largest segment of this market is the rebranding of multiple locations. You might not be able to land a contract with a large bank account, but think of all the businesses you already do work with that have multiple locations, and once a new logo or look is launched there are tremendous opportunities for signage.

For custom architectural signage like this, it is best inspected and picked up at the wholesaler's location with your own

vehicle and trailer, have your sub-contracted installer do that for you, or if you have a wholesale source similar to Diversified Signs, have them do the whole job. There can be advantages to having the fabricator also install.

Navigating the world of exterior wholesale signage can seem a bit overwhelming initially. It's important to do your homework up front before contacting a company. Know your local permitting constraints and procedures, do a good site survey to determine any electrical needs or potential issues lying below the ground, and get good quality vector artwork.

From there, let your new wholesale contact guide you through the rest of the process, and always remember to manage your client and your own expectations that are realistic so all parties win at the end of the day! **GP**

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# BREAKING GLASS CEILINGS

# One Design at a Time

BY STEFANIE GALEANO-ZALUTKO

*Reimagining spaces from floor to ceiling at Metropolitan West, aka MetWest, a dynamic and innovative shop based in Long Beach, California*



Stefanie Galeano-Zalutko is the president/CEO of Zalutko Business Services, Inc., a marketing agency based in Central Florida. She can be reached at [szalutko@zalutkobusiness.com](mailto:szalutko@zalutkobusiness.com).

popular targets for graffiti tagging, she says there was an equally important need for effective removal solutions. Taylor was intrigued, seizing the moment to launch a novel service and make her mark.

“I saw that all these buildings had severely damaged glass from the tagging,” she says. “So, first, I looked at the train lines to see what they were doing, which turned out to be a clear film on the glass, and I thought, ‘Well, I can do that.’”

The business venture took her straight to the top — literally. As Taylor perfected these services on high-rise buildings across the city, she was commissioned for complementary services like applying interior safety film, solar-controlled window tinting, frosting and privacy films for office areas and conference rooms.

“The business diversified naturally for me, with new [requests] turning into



Kelly Taylor, CEO of Metropolitan West (MetWest), at the company's showrooms and offices in Long Beach, California. (Photo by Regan Dickinson)

**Y**oung, burned out and eager to explore other professional opportunities, Kelly Taylor possessed the courage to walk away from a steady but stressful corporate career in search of a fresh start in a new city.

At the time, a friend piqued her interest about more women working in construction-related fields, specifically with the Red Line subway in Los Angeles. As trains and buildings became increasingly



The MetWest Showroom Conference exterior combines custom printed glass film, vinyl, dichroic film, DI-NOC and wall covering to create a cohesive work of art showcasing the creative potential of combining materials and surfaces.



The design for the MetWest Showroom lobby flows from the floor to the walls to the ceiling for a 360-degree graphic experience incorporating wall covering, gold metallic vinyl and vinyl with anti-slip laminate.

organic expansion opportunities,” she says, crediting a willingness to adapt and evolve as the foundation for growth.

Eventually, Taylor steered the business into printing capabilities, investing in a Roland 540 roll-to-roll. Affectionately pet-named *Rolanda*-Roland, Taylor says.

The original printer made it possible to expand further into glass films and wall coverings. From the onset, Taylor was fascinated by experimenting with different ink types and effects. She focused on honing her professional techniques and producing unique finishes.

“At the time, I had no business buying the second and third printer but I thought, I’m going to grow into them,” Taylor says. And grow into them, she did.

### The road to success

Throughout the decades, Taylor successfully transformed a small graffiti removal start-up into a premier full-service window film and wall graphics powerhouse known as Metropolitan West (MetWest).

Founded in 1992, Taylor says MetWest is revered for its premium material sourcing, exceptional product selection, and innovative office solutions. The CEO and serial innovator credits the trifecta for inspiring “breathtaking, comfortable and environmentally-sustainable” workplace settings.

MetWest further channels sophistication and functionality through



This mural wall covering at the MetWest Showroom incorporates UV Spot printing for a mixed gloss and matte finish.



MetWest production team member trimming a custom printed Peerhatch wall covering panel.



A custom-printed gradient on PVC-free glass film for Amare features a vivid purple gradient as well as a logo and typography to reflect the company's branding.



MetWest's sample boxes give customers a good feel — literally — for the materials that may be used on their project, for all types of applications, from glass to ceilings.

cutting-edge technology and progressive design — a process internally referred to as *WOWification*.

For Taylor, there is no better testament of potential than MetWest headquarters in Long Beach, California. The penthouse suite is both spacious and chic, with elegant finishes throughout. From the floors and doors to the walls, Taylor says the former blank canvas showcases the power of exquisite interior design and mirrors the glass ceilings MetWest is committed to shattering.

By setting a higher standard, Taylor says the company can reimagine branding and invest in proprietary techniques that far exceed the ordinary. High-impact designs, superior finishes, and long-lasting results define MetWest.

From architects and interior designers to general contractors and property managers, she says industry professionals across the spectrum are drawn to the MetWest way. Elite Fortune 500 clients like Fox, Amazon, Netflix and Red Bull, for example, appreciate the company's full package — high energy, quality materials and proven results.

"I don't think there was one big break; rather, a series of smaller projects that received some notoriety. Then we were trusted with larger projects," Taylor says, pointing to other prominent collaborations with TikTok, FedEx and Disney. "[Before long], companies felt more comfortable referring us to others, and we started to scale the business accordingly."

Taylor applauds passionate staff members as the difference makers, pointing to around 30 in-house employees, plus outside manufacturer representatives, contractors, and installers, all of whom breathe the company's core values and prioritize the customer experience.

She emphasizes that no matter the client or project, MetWest is a long-term partner — not a short-term solution.

"We've truly built our value proposition and reputation for unmatched quality [from the ground up]," Taylor says. "At MetWest, we refuse to use cheap, inferior products to save money."

### Setting the benchmark

Today, the company designs, supplies and installs wall coverings and graphics,

solar control films and decorative or specialty films for glass, walls, floors, ceilings and doors. There is no material, technique or finish that is off the table with MetWest, from spot and layered printing to large-scale building wraps.

Taylor says the glass film and wall covering categories constitute a majority of the business revenue — at 60 and 30 percent, respectively.

Decorative films are designed to enhance glass walls and windows, simultaneously providing privacy and adding pizzazz to a workspace. MetWest’s extensive offerings and finishes, from popular gradients to ombres, turn standard office areas into admirable works of art. Clients can choose from a variety of classic and modern stock films, or collaborate on a custom design. Most MetWest clients choose to create a unique custom-branded project.

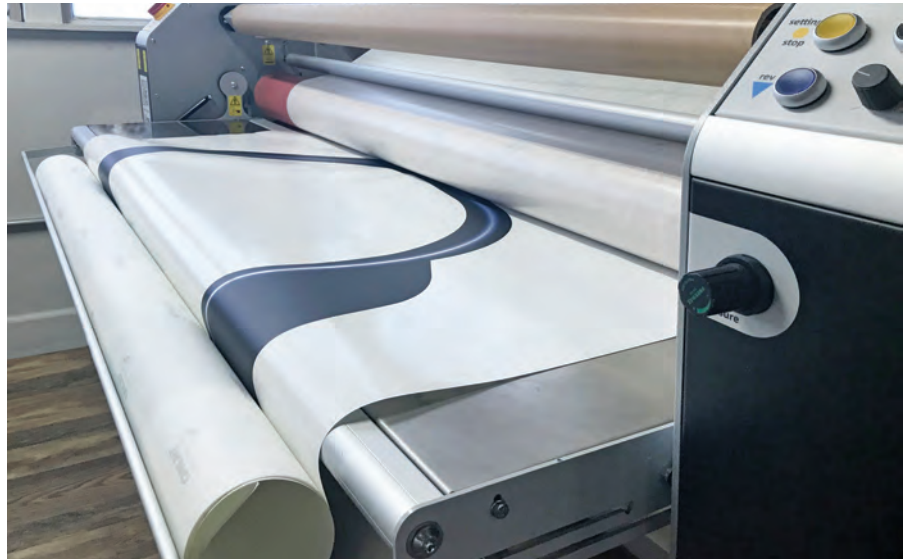
Taylor points to an investment in white ink technology as a key reason for growth within the category.

“Printing on clear film is very difficult for a long-term solution,” she explains. “We needed to come up with something that would last a long time, plus hold up to abuse and cleaning. It took a while, but we figured it out and have been printing white as a specialty for years.”

MetWest also boasts custom mural wall coverings, which immediately transform a space from bare and bleak to bold and beautiful. MetWest serves up numerous large-scale designs, including landscapes, abstract art, and geometric shapes. Whether clients desire a riveting focal point or an entire accent wall, MetWest offers a magnetic, metallic, PVC-free or spot-UV solution to spec.

In addition, Taylor underscores the company’s patented Peerhatch technology as a writable surface — a completely reimagined traditional whiteboard concept. With Peerhatch, clients can leave writing up for months — even permanent marker — and it will still wipe clean without leaving behind unsightly smudges.

Peerhatch is designed to cover any size space, from small offices to entire buildings. Clients can choose a preferred product backing: Type II is similar to regular



Laminating a custom print at MetWest, which runs a Mistral 1650 and Neschen HotLam 1650 TH.

wallpaper and is applied with wallpaper paste, while the adhesive-backed option allows for faster installation. Meanwhile, a magnetic backing adds extra functionality to any workspace.

Taylor says the six-story NFL Media building in Los Angeles is a fine example of how multiple materials, products, techniques, and finishes come together to achieve a uniquely unified look and feel. MetWest collaborated alongside 25-plus

designers at NFL to carry the vision to reality, applying a custom frosted finish in the conference rooms, Peerhatch in the collaboration areas, and a 600-foot wall covering featuring a slick black background and high-impact imagery.

Looking ahead, Taylor points to gel technology as a game changer due to its seemingly indestructible nature.

“I can literally soak a printed piece of wall covering in a bowl of bleach



For TikTok’s Los Angeles headquarters, this design incorporated two different types of dichroic glass film as well as black vinyl.



For the NFL Los Angeles' custom wall coverings, MetWest lent technical expertise by finding the best materials to execute each concept, including a variety of metallic wall coverings. (Photo by Fotoworks©Benny Chan)

overnight, remove it in the morning and still have an unchanged image; the color has not faded. Baking soda, toilet bowl cleaner, even Drano — we have not found anything that can destroy the durability of the gel on glass film or wallcoverings,” she explains. “In addition to being a comparable product, it’s also more affordable.”

### Leading by sample

Taylor recalls the challenges of kick-starting the graffiti removal venture and

still applies those valuable professional lessons today.

“I remember hiring a local sign shop to do work for me, but I was always operating on *his* schedule because other customers came first. I quickly realized that I didn’t like the dynamic, and that’s what motivated me to buy my first printer,” Taylor says, emphasizing the impact of investing within.

“[Today], we have oversight management of the entire process — from design

and production to the installation,” she adds. “Our team helps with the entire phasing of a project, including estimating, field management and elevations.”

While most companies send a small sample during the strike-off phase, MetWest ensures a more realistic experience to best demonstrate the quality and application of the product on a sizeable project example.

Custom glass films are sampled on sections of the requested material to show the color, opacity and/or pattern. With gradients, clients receive 6" wide strips to maximize the full height of the gradient for testing. Likewise, for mural wall coverings, MetWest prints large 24" × 30" sections at full scale in order to accurately depict the final print quality.

Once a project moves through vision, design, and various stages of measurement, it is teed up for production. The 8,000 square-foot production and warehousing facility is conveniently located near headquarters.

Skilled laborers spend their days immersed in precise mathematics that transform raw materials into remarkable final form. Mere inches separate good and great results — and the distance between



The NFL's conference room designs in Los Angeles had a double-sided visual, with one image appearing while looking in and another image while looking out. To implement this, the most complex rooms required the combination of four different production processes and three different materials. (Photo by Fotoworks©Benny Chan)

### STEP 1: ESTIMATING

We will do take-offs based on your architectural drawings and send you a pricing estimate.

### STEP 2: FIELD MEASUREMENT

We will send our field estimator to measure your space. If this is a print & ship project, please measure your space and provide us with the dimensions. Photos of the space are also requested if possible.

### STEP 3: ELEVATIONS

Measure your space and provide us with the dimensions. Photos of the space are also requested if possible.

### STEP 4: STRIKE-OFF

We will send samples for material type and color for your review and approval.

### STEP 5: PRODUCTION

Once you've approved the elevation and samples, your project moves into production! After production is complete, we will either ship your project to you or contact you to schedule installation.

### STEP 6: INSTALLATION

We will work with you to schedule at a time that works best for you. The installation time frame depends on the project size.



The visual star of the RealD's Boulder, Colorado, space is this massive two story mural wall covering, installed over walls of varying depths, a mezzanine, and ceiling.

good and great is people. Taylor points to certain soft skills as cultivating a positive workplace culture.

“It all starts with my attitude about things, right? I don't like micromanaging; it takes a lot of time,” she says. “Instead, I operate from the perspective of ‘Have this done, and how you do it is up to you.’ This approach breeds independence and empowerment. I want staff to think for themselves, practice time management and find solutions to get projects done right the first time.”

The result is a well-trained and tight-knit production crew that is versatile and knowledgeable in assisting across multiple departments.

Taylor says people, processes and promises define the MetWest Advantage — the company's unwavering commitment to deliver an exceptional experience from the instant a client interacts with staff to the completion of a project.

“The MetWest Advantage is an assurance we offer confidently and consistently,

which facilitates the retention of our clients, fostering their satisfaction over the years,” Taylor says.

The business mogul encourages small and large independent shops to operate with the same spirit and commitment — an authentic, meaningful pledge to outwork and outperform the rest. **GP**



MetWest's Canon UVgel printers at the production facility. MetWest runs a Canon Colorado 1650 and Colorado M Series, as well as a Roland VersaUV LEC2-640, and HP Latex 560.



The Peerhatch Dry-Erase Wall Covering for Edmunds is custom-printed with Edmunds branding. This project called for 10,000 square ft of writable material throughout the space.



# Channel Letters: The Trim Cap Choice

*To trim, to retain, or not to trim – each has its own merits*



Matt Charboneau started his career in the sign industry in 1985 as Charboneau Signs, later changing it to Storm Mountain Signs. In 2017, he published the Pre-Sale Sign Survey Field Guide. He also provides sign design training at his site: LearnSignDesign.com. Contact him at [matt@stormmountainsigns.com](mailto:matt@stormmountainsigns.com), [LearnSignDesign.com](http://LearnSignDesign.com), or 970-481-4151.

Your client calls and wants to look into a set of channel letters for her storefront. She is calling because the set she purchased 15 years ago has trim cap and...

Let's stop right here. If you don't know what trim cap is on a channel letter, well this is your lucky day. This article covers the decision-making process of choosing to purchase or recommend trim capped or non-trim capped channel letters. What's the big deal, you say? Well, I have gathered up around 1,500 words that will provide you with a better understanding of their differences.

Trim cap is the product used to hold acrylic faces tightly to the aluminum returns of a channel letter. It works very well, it's usually easy to assemble, and it offers a wide variety of colors and sheens that can be customized by preparing and painting the trim cap with anything similar to MAP. (See **Photo 1**)

Back to the client's sign that has a failing trim cap condition...

The trim cap is beginning to fail, as most plastics eventually do. It's typically due to exposures to high levels of ultraviolet light (daylight). The business owner saw the clean-looking trimless letters that the bank installed and thinks they might look nice to replace her current sign. (See **Photos 2 & 3**)

The problem is her market would most likely *not* benefit from trimless letters specifically because of their look; they're too crisp and clean and corporate looking. Not to mention, trimless letters will cost about 20 percent or more to fabricate. Here is a short list of industries that most likely would not benefit from a trimless channel letter:



**Photo 1:** Trim cap and just some of the colors available.



**Photo 2:** Trim cap as it would appear on a standard channel letter.



**Photo 3:** Trim cap that has seen better days.



**Photo 4:** A large-format letter with fabricated retainers.

- Most restaurants — other than Ruth’s Chris or Morton’s, for example
- Most service industries (plumbers, electricians, welders, etc.)
- Any business that’s in the holistic care industry
- Most chiropractors or physical therapists... the list goes on and on.

Before we dig deeper into our trim-cap topic, it is important to mention one other face retention method: a fabricated retainer. It means exactly what it says... it’s fabricated by hand. It’s got some definite holding power on larger letters. (See **Photo 4**)

For larger letters or letters in high wind areas, this labor-intensive method of fabricating retainers from aluminum act like a retainer for a cabinet face. It’s L-shaped, routed and welded, and attached to the returns of the letter, demanding a higher level of accuracy in cutting and building.

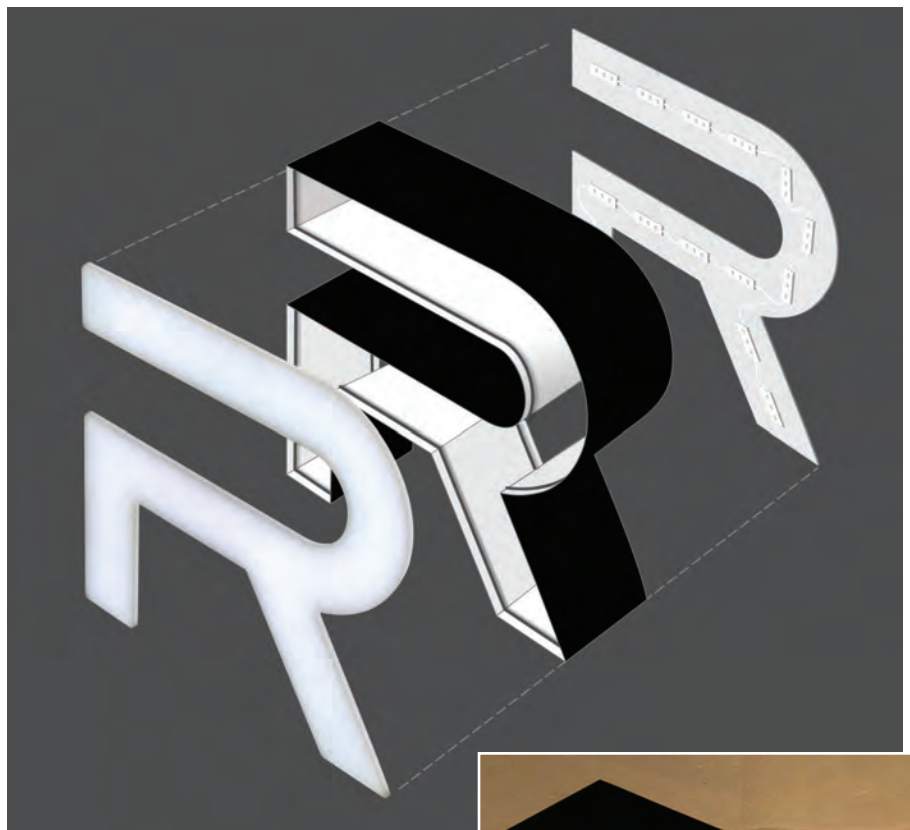
Due to the labor intensive process, these retainers are typically reserved for letters over 48" tall that are intended to be installed outdoors, possibly in high wind areas, and for letter sets that never get a break from the intensity of the sun, where trim cap might fail prematurely. (See **Photos 5A & 5B**)

### What is trim cap constructed of?

Trim Cap is made from a flexible plastic with a thin aluminum core that helps it hold its shape in hot weather. It also provides stability during the chemical bonding process so that the “heat” of the glue (caused by a chemical reaction of the glue and the plastic) doesn’t warp or deform the trim cap’s outer surface.



**Photo 5A & 5B:** Full retainer for channel letter on a bench in the shop. The return of the retainer is easy; routing the face takes skill and file management.

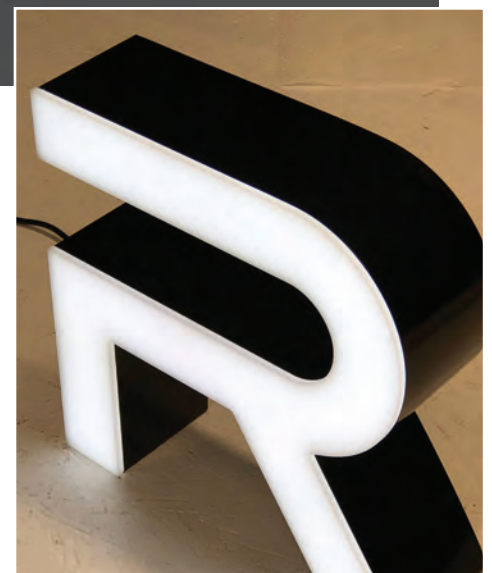


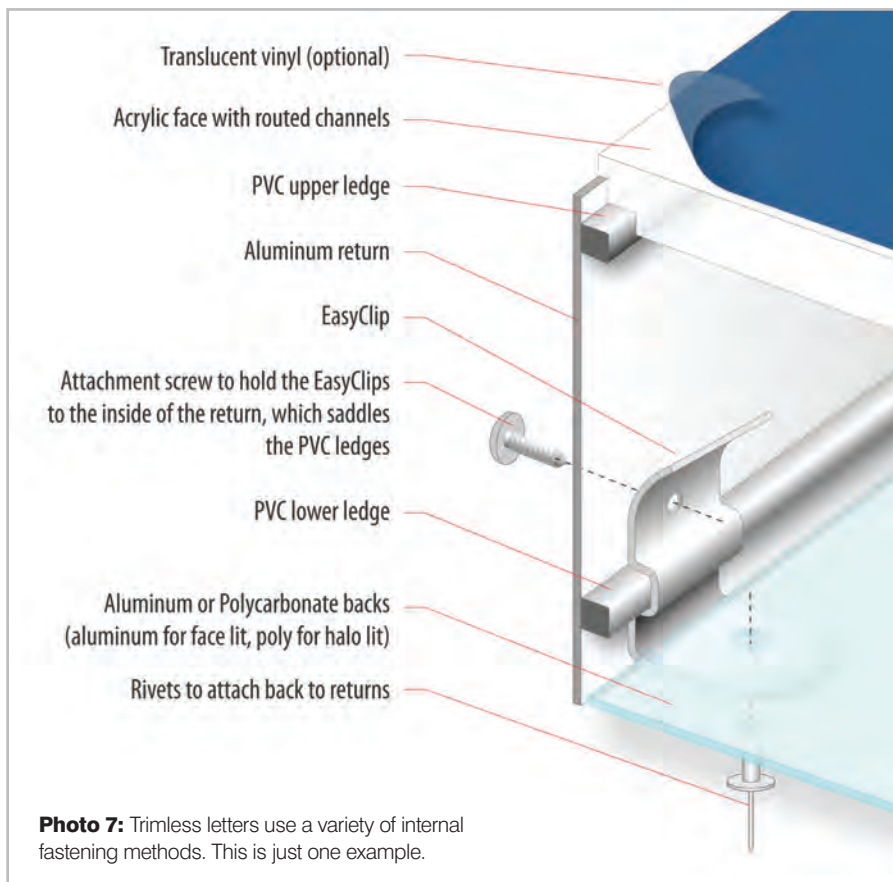
**Photo 6A & 6B:** Trimless letters have no trim cap. Here is a basic exploded view, and a trimless letter with a white face and no trim cap!

### What is a trim cap-free channel letter?

A trim cap-free letter is one that is fabricated without trim cap. I know, that wasn’t very helpful but let me try and explain it this way, with a visual graphic... (See **Photos 6A & 6B**)

The face of the letter is held in place with a retainer or bracket or via a created return surface (sidewall) of the acrylic that





lawyers, and big box stores all need that laser-clean corporate look. A cleaner look can also work against the unique subliminal message being conveyed — which endorses the visual message.

This just happens to be one of the illustrations I created for a specific style of trimless channel letters. Note the fastening system inside of the letter return. This and other methods are available from some of the wholesale channel letter suppliers. (See **Photo 7**)

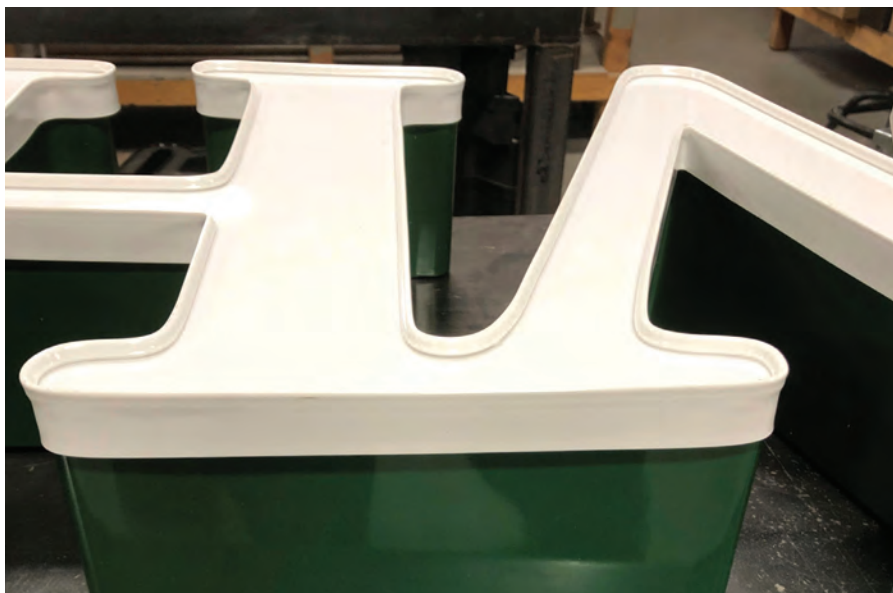
### It's time to design the client's new channel letter sign

Here are a few conditions to consider when looking at using channel letters for creating a client's sign. Will any of these affect the look of the letter the client is looking for?

Larger channel letters get 2" trim cap! I have not seen the definitive rule of thumb on how tall the channel letter must be before it gets a 2" wide trim cap. There are some disadvantages to the wider 2" trim cap, and it may be a large enough channel letter set that you might consider a fabricated retainer.

Font or typestyle — some bold fonts have wide, fat surfaces, like the one used for the Best Buy logo. That wide of a letter for a big box store is perfect for the trimless channel letter. Stroke width variations — some fonts offer thick and thin stroke widths within the same letter. This can pose a dilemma if it's too extreme, as the trim cap's side profile on the return can conflict visually with the letter face, making it difficult to recognize it as a letter of the alphabet. This is one of the easily overlooked end results that can add visual clutter to an already challenging typestyle. As a keyline enhancement — Trim Cap can add an element of visual interest when incorporated into a channel letter face design that uses key-lines. Adding a white trim cap to a letter with a white key line can provide a thicker, wider-looking letter face — or ruin a unique element of a font's visual style. (See **Photo 8**)

Keylines are the gap that is intentionally created by applying vinyl to the face of the acrylic and cutting the vinyl in such a way



**Photo 8:** Great example of how to use trim cap to make the letter face (stroke width) look wider.

has a stair-step look. The various methods available all come with pros and cons, just as trim cap does.

However, one of the benefits that a trim cap free letter offers has been described as “a cleaner look” and all that a cleaner look might carry with it regarding the impression it leaves with the viewer. Banks,

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**CHARLOTTE, NC**  
November 7-9

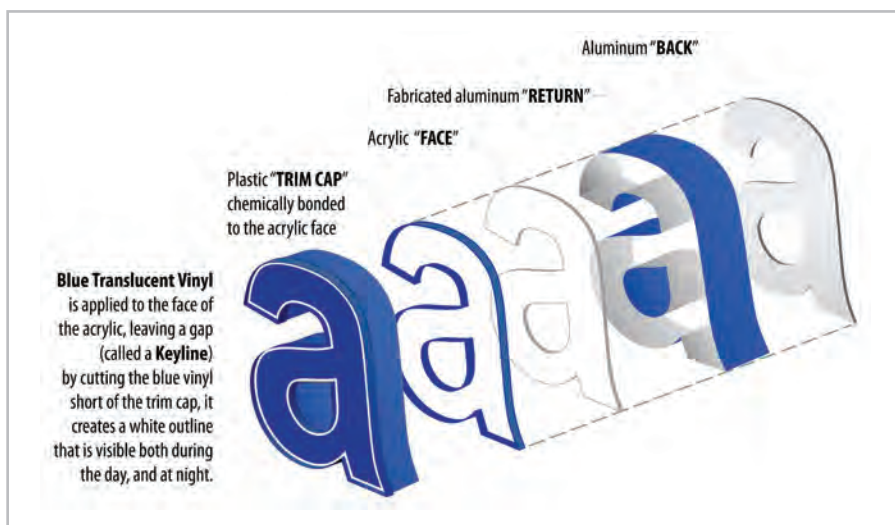


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**Photo 9A:** Great use of trim cap to accent the letter face.



**Photo 9B:** Keyline channel letter face exploded view.

that a gap is left between the edge of the trim cap and the vinyl, giving the letter face a white outline around its perimeter.

Now that you have a better understanding of how channel letter face retainer materials can affect the design, here are some sign examples that expand on my points about being aware of how trim cap can change the way a channel letter looks and feels.

Wall colors, return colors and multiple colors in the sign can add to visual clutter. Using trim cap and key lines to help your design look sharper, read better or be more visible is just one of the ways to consider readability when designing channel letters. (See **Photos 9A-9E**) **GP**



**Photo 9E:** Domino's Pizza does a great job of using key lines and trim cap.



**Photo 9C & 9D:** Keyline or trim cap in contrasting color would help readability.

# GP+

## LASER ENGRAVING

GP+ is a monthly section of GRAPHICS PRO dedicated to taking a deep dive into a specific graphics market. This month's section is all about laser engraving.



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### HOW TO LASER ENGRAVE WOOD PRODUCTS

*Courtesy of Johnson Plastics Plus*

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### LASER ENGRAVING ON METAL

*Courtesy of Rowmark*



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# THE HIGH- POWERED LASER ENGRAVING MARKET

*Survey indicates solid road ahead for customization shops*

BY MATT DIXON

**G**RAPHICS PRO's 2023 Market Intelligence Survey shows that only 9% of companies involved in laser engraving had lower profits than the previous year, and only 4% had a smaller staff than the previous year. This is encouraging news and falls in line with a recovering market after both COVID-19 and supply chain interruptions.

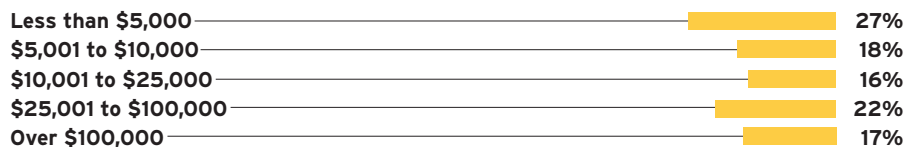
Awards and plaques are responsible for the greatest amount of revenue, and mugs and drinkware lead the field in terms of products sold.

Laser engraving continues to be a profitable market segment for graphics professionals and is a tremendous option for shop expansion. We asked a few industry experts about the laser engraving market and where the industry is heading. **GP**

## Here are some other findings from our survey:

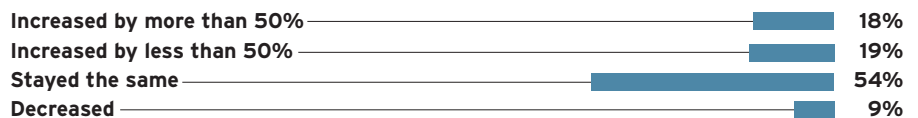
55% of survey respondents reported a total annual revenue related to laser engraving of greater than \$10,000.

### Total Annual Revenues Related to Laser Engraving:



91% of respondents reported that sales in the last 12 months have either stayed the same or increased.

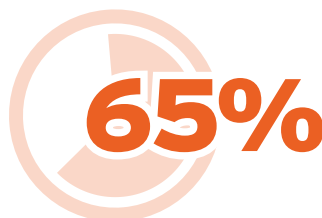
### Sales in Last 12 Months for Laser Engraving:



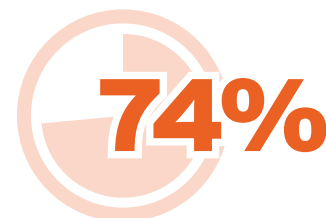
### The State of Laser Engraving

Industry experts weigh in on the current laser engraving market and where they believe we're headed for the future:

<https://gpro.link/laser2023>



of respondents expect their laser engraving business to increase in the next 12 months.

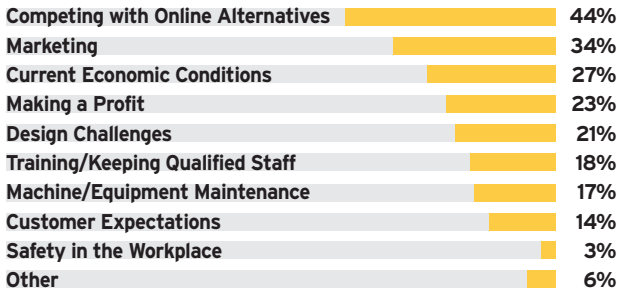


of survey respondents reported having a positive general outlook on their laser engraving business.



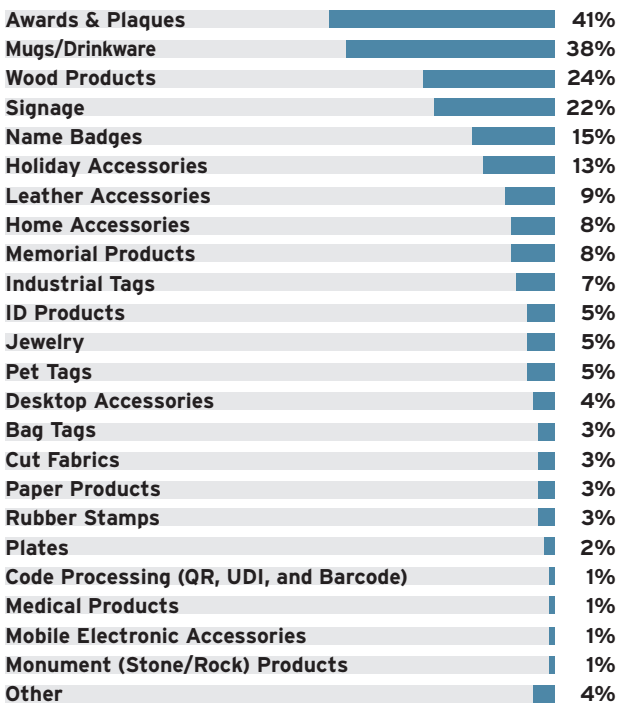
The survey indicated that competing with online alternatives is the greatest challenge in laser engraving.

**Greatest Challenges in Laser Engraving:**



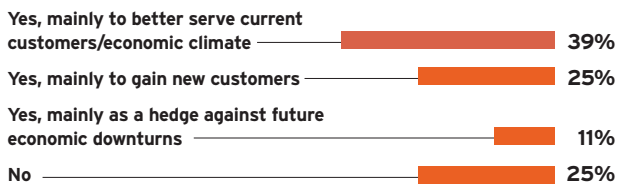
Survey respondents who sell laser-engravable products listed awards and plaques as the top revenue-producing products.

**Top Laser-Engravable Products by Revenue:**



The majority of respondents (75%) indicated that their business was expanding into other technologies.

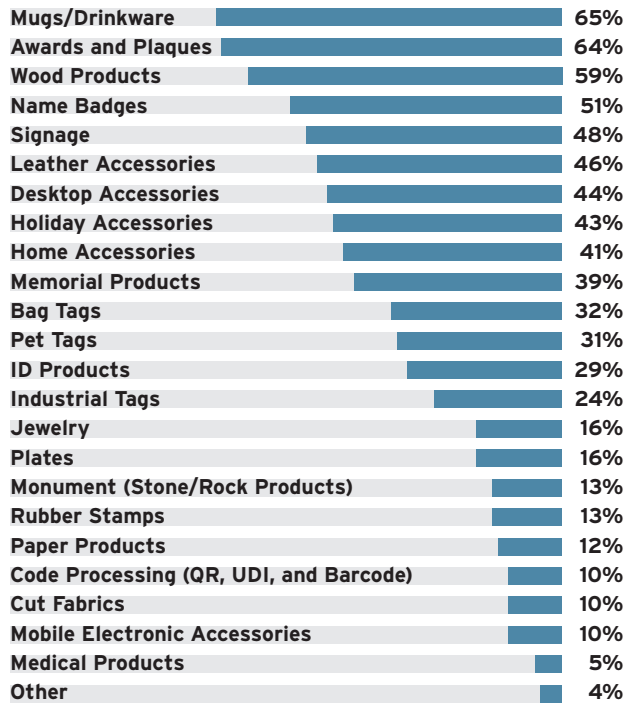
**Do You Plan to Expand Your Business into Other Technologies?**



of respondents say that brand loyalty is important when making a substrate (blank) purchase.

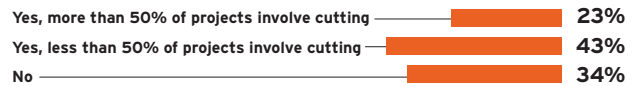
Survey respondents who sell laser-engravable products most often reported selling mugs/drinkware.

**Top Laser-Engravable Products Sold:**



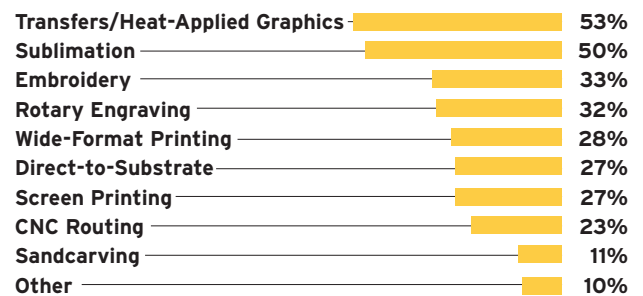
The majority (66%) of survey respondents use their laser engraving system for cutting (fabricating).

**Are Laser Engraving Systems Used for Cutting (Fabricating)?**



When asked which additional decoration/customization techniques were used in the business, survey respondents indicated transfers/heat-applied graphics and sublimation as the top choices.

**Additional Decoration/Customization Techniques Used:**



\*The survey indicated that 48% of shops that use social media reported an increase in sales due to their social media presence.

**\*Did Sales Increase Due to Social Media Activity?**



# Market Your Engraving Services to Breweries

COURTESY OF EPILOG

From stickers to coasters to pint glasses and beyond, breweries and distilleries sell and give away a lot of swag. By marketing your personalization services to these types of establishments, you can open an entirely new revenue stream!

Here, we'll look at a few different applications perfect for this growing industry.

What types of laser engraved goods do breweries and distilleries need? The possibilities are nearly endless:

- **Apparel** – leather hat patches, custom T-shirts, and branded canvas bags for to-go orders
- **Beer tap handles** – highlight a limited release brew and identify your best sellers
- **Coasters** – wood, leather, and even card-stock coasters can be customized with a laser
- **Glasses** – engrave pint glasses, pilsner glasses, and snifters and more
- **Growlers** – glass or metal, your laser can do both
- **Flight boards** – brand your boards with a logo or engrave the names of your most popular tasters
- **Packaging** – create custom packaging to house cans or bottles
- **Signage** – from promotional signage to directional/informational signage, a laser can create all kinds of signs from a variety of materials  
...and more!

Branded items build recognition for these types of businesses. Being able to add a logo to equipment and products in an inexpensive fashion is a great way for you to help breweries and wineries maximize their exposure. The laser also provides flexibility in creating messages for limited-release products and special events.

## Add a fun personalization experience to brewery tours

Brewery and distillery tours are big sellers. Consider marketing your on-site engraving services to help add to a patron's experience by ending the tour with a

customized glass to commemorate the visit? If you already have a stock of glasses already engraved with a logo, it will take just minutes to pop the glass in the laser and add a name and date.

Or you can upsell the customization experience by personalizing growlers, wine, or shot glasses. Whether they are customer-supplied or sold by you, this is a great value-add to breweries and distilleries.

Breweries, distilleries, and wineries sell and give away a considerable amount of branded and personalized products - consider tapping into this market today! **GP**



# Gravostyle Print & Cut Registration

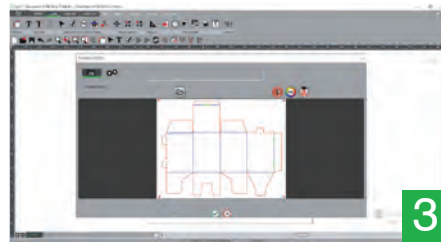
COURTESY OF GRAVOTECH

**G**ravostyle Engraving, Routing and Laser Software has a robust suite of tools for designing complex job layouts. While having an extensive array of tools for text and graphic design, it also includes wizards to help users perform complex tasks more easily. The most popular wizards are Variable Text, MultiCopy, Vectorization, PhotoLase, and Print & Cut Registration.

In this article, the focus will be on the Print & Cut Wizard that is popular with users of gantry lasers and large format engraving routers. The Print & Cut Wizard utilizes the red laser pointer on smaller lasers and rotary engraving tables for registration, larger lasers can be fitted with a registration camera system which automates the process. The Gravostyle "Print and Cut" function utilizes a .PDF file to validate fiduciary mark locations and adjust the cut file for stretch, skew, rotation, and scaling changes that can occur when outputting the file to a printer, during printing, or in the lamination process.

Most designers will create the print file in a third-party design program (Adobe Illustrator or CorelDraw) and save the project as a PDF production file. The PDF should contain separate layers for the print image, markers, and cut lines. The file is then accessed in Gravostyle by using the Print & Cut wizard icon. (The illustrations included were prepared in Gravostyle 9).

- 1** Open Gravostyle: Start by opening the Gravostyle 9 software on your computer and creating a job layout matching the bed size of your laser or rotary engraver.
- 2** Select the Print & Cut icon on the "Objects" tool bar: The Print & Cut Wizard will open. Next import the desired production file by clicking on the folder icon and navigating to the desired file. A cut line preview of the selected job will appear for reference. Click OK to validate the file selection.
- 3** Initiate registration: Click the "Locate" icon to begin the registration sequence. If no camera



3

is present, you will be using the red pointer for validation, the machine will advance to the 1st registration mark. Use the keyboard arrow to center on the registration mark and press check. The machine will then advance to the next reference mark and the process is repeated until registration is complete. When the optional registration camera is installed, the live camera view is displayed on-screen, and the process is automated.

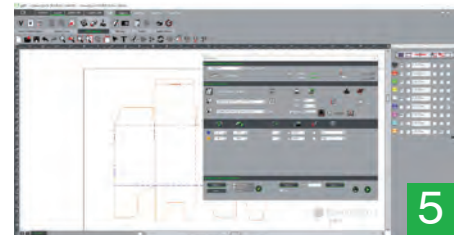
- 4** Cut file importation: Upon completion of the registration sequence, the processed cut file will appear in Gravostyle.
- 5** Set parameters: Configure the machine's engraving settings such as power, speed, and other parameters based on your material and design requirements. These settings may be accessed by clicking the drop-down menu for the "Material Presets Library."

- 6** Send the design to the laser or engraver: Once your design is ready and the parameters are set, you can send the design to the engraving machine for cutting. This is typically done by clicking on a "Send" or "Start" button within the software.

- 7** Engrave the design: The engraving machine will now engrave your design onto the material according to the settings you specified.

- 8** Remove the finished product: Once the cutting is complete, carefully remove the finished product from the laser or rotary engraving machine.

The Print & Cut process within Gravostyle is well suited for integration into applications and processes including puzzle making, wayfinding, informational, and ADA signage, direct-to-film processing, cutting of decals, embroidered patches, sublimated



5

textiles, point of purchase displays, and digitally printed media for lamination onto wood, acrylic or other substrates.

Contact your Gravotech distributor or territory manager for more workflow information. Additional information and support can be obtained on our website at: [www.Gravotech.US](http://www.Gravotech.US), by visiting the Gravotech Operators Group on Facebook, or scanning the QR Code. **GP**



# Exploring CerMark Metal Spray

COURTESY OF JOHNSON PLASTICS PLUS

## How does CerMark spray work?

CerMark metal marking sprays work their magic through a unique chemical reaction. When applied to a metal surface, the spray contains specialized ceramic particles that bond with the metal during the laser engraving process. When the laser interacts with the sprayed surface, it heats the ceramic particles, causing them to fuse with the metal and create a durable, permanent marking. This chemical bond ensures that your engravings withstand the test of time, maintaining their quality and appearance for years to come.



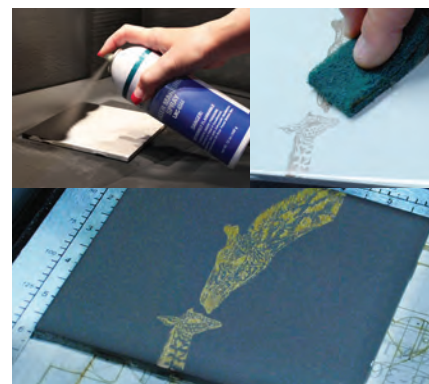
## How do you use CerMark metal marking spray with a laser?

- 1 Prepare the metal surface: Ensure that the metal surface is clean, dry, and free from any contaminants. Clean the surface with isopropyl alcohol or a similar cleaning agent to remove any dirt, oils, or residues.
- 2 Shake the can: Before using CerMark spray, give the can a good shake to mix the contents thoroughly. This ensures an even distribution of the ceramic particles for optimal results.
- 3 Apply the spray: Hold the can approximately 8-10 inches away from the metal surface and apply a thin, even coat of CerMark spray. Be careful not to overspray, as a little goes a long way.

- 4 Let it dry: Allow the sprayed surface to dry completely. The drying time can vary depending on factors like temperature and humidity, typically taking around 5-10 minutes. Avoid touching or disturbing the sprayed area during this time.
- 5 Laser engraving: Once the CerMark spray is dry, you're ready to use your laser engraving machine. Set the laser parameters according to the recommended settings for the specific metal you're working with. The laser will interact with the sprayed surface, creating the permanent engraving.
- 6 Clean surface: After the laser engraving process is complete, use water to wipe off excess spray.

CerMark metal marking spray is a game-changer for laser engraving enthusiasts. Its ability to create permanent, high-quality markings on metal surfaces opens up a world of creative possibilities. By understanding how CerMark works, its permanent nature, the steps involved in using it, and its composition, you can confidently embark on your metal engraving projects. Let your imagination soar as you create personalized gifts, stunning artwork.

**Note:** Always refer to the specific instructions provided by the manufacturer of CerMark metal marking spray for the best results and ensure you follow safety guidelines during the entire process. **GP**



# Laser Engraving from Small to Large

*Breaking down the types of laser engravers, their benefits, setup, and use*

BY CHASE WAGNER, MANUEL RODRIGUEZ, AND JOHN TARN



Chase Wagner is the machine operator, Manuel Rodriguez is the project manager, and John Tarn is the owner and president of Xtreme! Marketing, a full-service sign, graphics, and event marketing company in Pilot Mountain, North Carolina. You can read all about the company in the August issue of GRAPHICS PRO.

The team with our main laser, which we nicknamed Speedy... because it is. The team is Machine Operator Chase Wagner; Project Manager Manuel Rodriguez; and Owner & President John Tarn.

**L**aser technology has revolutionized many businesses including our own and has provided us with a multitude of benefits. We hope to add massive value by sharing our wealth of knowledge with you to help transform your business.

We will explore the advantages of owning a laser, the different types of lasers available, safety considerations, setup for success, file setup for optimal results, and best practices to achieve outstanding outcomes...

## Benefits of owning a laser

Owning a laser can have a significant impact on your business or personal projects. In this section, we will cover some of the key benefits that we have experienced.

**Precision and versatility:** Laser technology provides exceptional precision, allowing for intricate and detailed cuts and engravings. Whether you're working with wood, metal, acrylic, or other materials, lasers offer versatility in creating precise designs. With these precision cuts you are able to inlay acrylics that would not be possible with a router.

**Time and cost efficiency:** With high-speed cutting and engraving capabilities, lasers can significantly reduce production



The logo and letters were cut individually out of acrylic on the laser for this church sign.

time and costs. By eliminating the need for additional tools, lasers streamline the manufacturing process and reduce expenses in the long run.

**Customization and personalization:** Lasers enable you to create unique and personalized products. Whether it's engraving names on jewelry, adding logos to promotional items, or creating custom designs, lasers offer endless possibilities for customization. At Xtreme! Marketing we use lasers for cutting acrylic letters for signs, engraving wood and tumblers, patches for hats, and far more. Our customers know that innovation is key when it comes to their marketing pursuits, which is why we never limit ourselves. We are in the business of customization.

**Minimal material waste:** Traditional cutting methods often result in significant material waste. Laser cutting minimizes waste by optimizing the use of materials, ensuring maximum efficiency and reducing costs.

**Ease of use:** Modern laser machines are designed to be user-friendly and intuitive, making them accessible to both beginners and experienced users. With the right training and software, you can quickly learn to operate a laser and unleash your creativity.

At Xtreme! our Machine Operator Chase Wagner stays on top of all laser projects and maintenance. Chase started working with us as an intern at 17 years old and now is the expert at Xtreme! when it comes to all of our machines, including the laser. He provided nearly all of the information for this article. We are certain that with a little time and willingness to learn, you can also become a laser expert.

**Types of lasers: CO<sub>2</sub>, fiber, and flexx**

When it comes to laser technology, there are several types available. Let's explore three commonly used types.

**CO<sub>2</sub> lasers:** CO<sub>2</sub> lasers are versatile and widely used in various industries. They are ideal for cutting and engraving non-metallic materials such as wood, acrylic, leather, and fabric. CO<sub>2</sub> lasers operate by emitting a high-powered beam of infrared light.

**Fiber lasers:** Fiber lasers are primarily used for metal cutting and marking applications. They utilize optical fibers to

Manufacturer of Gantry & Galvo Lasers,  
CNC Rotary Machines, Cutters, Accessories,  
Laserable & CNC Rotary Engraving Sheet  
Materials for the most efficient production  
Engraving & Traceability.



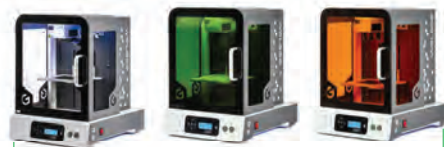
**Gantry & Galvo Lasers**



LS100



LS900

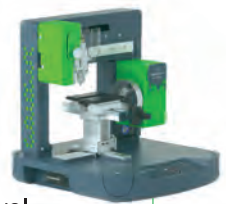


Welase Galvo Laser

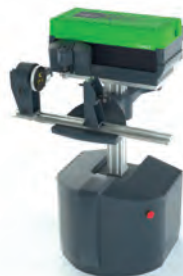
**CNC Rotary Engravers**



ISx000 Range



M20 Jewel



IS400 Volume



M40



[www.gravotech.us](http://www.gravotech.us)



We use these designs often to use as door prizes at local events for chamber or rotary. We have also gifted them to people in the respective towns.



The bottle openers, coasters, and keychains were all produced for one customer's giveaways at an event.



amplify the laser beam, resulting in high energy density and precise metal cutting capabilities. Fiber lasers are known for their speed and efficiency in working with metals like stainless steel, aluminum, and brass.

**Flexx Lasers:** Flexx lasers combine the

capabilities of both CO<sub>2</sub> and fiber lasers in a single machine. This hybrid technology allows users to switch between CO<sub>2</sub> and fiber laser sources, providing flexibility for a wider range of materials and applications. Flexx lasers are suitable for both non-metallic and metallic materials.



This benchtop was an anniversary present for a customer's wife.

### Safety considerations

Safety should always be a top priority when working with lasers. Here are some essential guidelines to follow:

**Protective eyewear:** Always wear appropriate laser safety glasses that are specifically designed for the laser wavelength you are using. This will protect your eyes from potential laser radiation.

**Ventilation:** Ensure proper ventilation in your workspace to remove any fumes or smoke generated during laser cutting or engraving processes. This will help maintain a safe and healthy working environment.

**Fire safety:** Keep a fire extinguisher nearby and be aware of any flammable

materials in your workspace. Take precautions to prevent fires, such as removing debris and ensuring proper ventilation.

**Machine maintenance:** Regularly inspect and maintain your laser machine to ensure it is in good working condition. Follow the manufacturer's guidelines for maintenance and cleaning procedures.

**Training and education:** Properly train yourself and your team on laser safety protocols and operating procedures. Stay updated on the latest safety guidelines and best practices to minimize risks.

### File setup for optimal results

Your file setup plays a crucial role in determining the outcome of your laser cutting and engraving projects. We have provided some tips below for effective file setup...

**Vector graphics:** Use vector-based design software, such as Adobe Illustrator or CorelDRAW, to create your design files. Vector graphics ensure scalability and maintain sharpness regardless of the size.

**Color coding:** Assign specific colors to different elements in your design to indicate the desired laser action. For example, use black for engraving and red/magenta for cutting. This color coding helps the laser machine interpret your design accurately.

**Line thickness:** Set appropriate line thickness for cutting and engraving elements in your design. Thicker lines indicate cutting paths, while thinner lines represent engraving areas. For example, if you're cutting a piece of acrylic, set the color of your stroke to magenta and then make the stroke .001 thick. If you want to engrave the acrylic you would make the stroke black and 1 pt thick.

**File formats:** Save your design files in compatible formats, such as AI, SVG, or DXF, depending on the laser software and machine you are using. Check the machine's specifications or consult the manufacturer for recommended file formats.

### Best practices for outstanding results

To achieve optimal results with your laser cutting and engraving projects, consider the following best practices:

**Workspace organization:** Keep your



We have a portable laser we use for our event marketing packages. Event goers can buy a custom engraved bottle. This was the example bottle used at an event (the box next to it is also engraved).

workspace clean and organized to ensure smooth operation. Remove any unnecessary objects or debris that may interfere with the laser process.

**Material testing:** Choose the appropriate material for your project and ensure it

is compatible with laser cutting or engraving. Different materials require different laser settings and techniques, so consult the material guidelines. Before starting a large-scale project, conduct material tests to determine the optimal laser settings for

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The inside and outside of a pen box for a customer.



This sign is made entirely from pieces of acrylic cut on the laser, including the stand.



Custom giant Jenga for our longstanding partner, Jack Daniel's, to be used at events. The blocks were also custom made.



Our laser allows us to do so much more for our customers ("Would you like fries with that?"), like flasks, glassware, and bottles.



This box was engraved for Xtreme! Marketing's Brenna Holloman's wedding to hold the couple's wedding bands.



The X is made of individual pieces of acrylic. The sign was fabricated in-house and the rest of the sign was wrapped in vinyl. It is attached to our office building.

your specific material. This will help you achieve the desired cutting depth, engraving quality, and overall outcome.

Trotec Job Control has different pre-sets that get you into the general area and then you play around with the settings to get what you want. The main things you will be changing are the laser power and the speed. For example, the slower it is, the more it will burn, and the more power, the more it will burn.

Wood is a good example because if you want a very deep engraving and burnt look, you have to slow the laser down and turn the power up, but if you want a much lighter look, then you have to turn the power down, and the speed up. We use this method on our cutting boards, depending on the look customers want.

**Focus and alignment:** Regularly check and adjust the laser focus and alignment

to ensure precise cutting and engraving. Proper focus and alignment are crucial for achieving sharp and accurate results. Follow the manufacturer's instructions for proper calibration procedures.

**Regular maintenance:** Keep your laser machine clean and well-maintained. Regularly inspect and clean the optics, mirrors, and lenses to ensure optimal performance. Follow the manufacturer's guidelines for maintenance procedures.

**Continuous learning:** Stay updated on the latest laser cutting and engraving techniques, software updates, and industry trends. Attend workshops, webinars, or join online communities to expand your knowledge and skills.

Remember, practice makes perfect! With time and experience, you'll become more proficient in utilizing your laser machine and achieving outstanding results. **GP**

## The Benefits of Using a UV Laser

COURTESY OF RADIAN LASER SYSTEMS

This article will discuss the benefits of using a laser engraver to engrave glass.

Engraving glass and crystal items has traditionally been done using laser masking and sand carving methods. Although the result is nice, the process is inefficient in many ways.

Another popular method for engraving glass is to use a CO<sub>2</sub> flatbed cutting machine. The process is remarkably similar to engraving other materials such as wood. The laser beam is projected onto the surface as the laser gantry moves back and forth over the surface to be engraved. For non-flat items such as drinkware, it's necessary to use a rotary device to rotate the part being engraved after each pass of the laser. Using a CO<sub>2</sub> flatbed is better than sandblasting in several ways. But the result is often not as nice as when sandblasted.

In recent years, UV lasers have started to take over for engraving glass. UV lasers have been around for many years. However, they have traditionally been extremely expensive, and the reliability of the laser sources has been poor compared to more traditional lasers such as CO<sub>2</sub> or fiber. UV laser systems have improved and now have higher wattages/reliability and lower cost than in the past.

UV diode lasers have recently been used with gantry-style flatbed systems, but the best approach to using a UV laser is when they are combined with a 2D (flat marking) or 3D (curve marking) galvanometer (galvo). UV lasers have several advantages over sandblasting and CO<sub>2</sub> laser marking solutions. Primarily, UV lasers produce a superior mark. The wavelength of a UV laser is easily absorbed by a wide variety of materials, including glass.

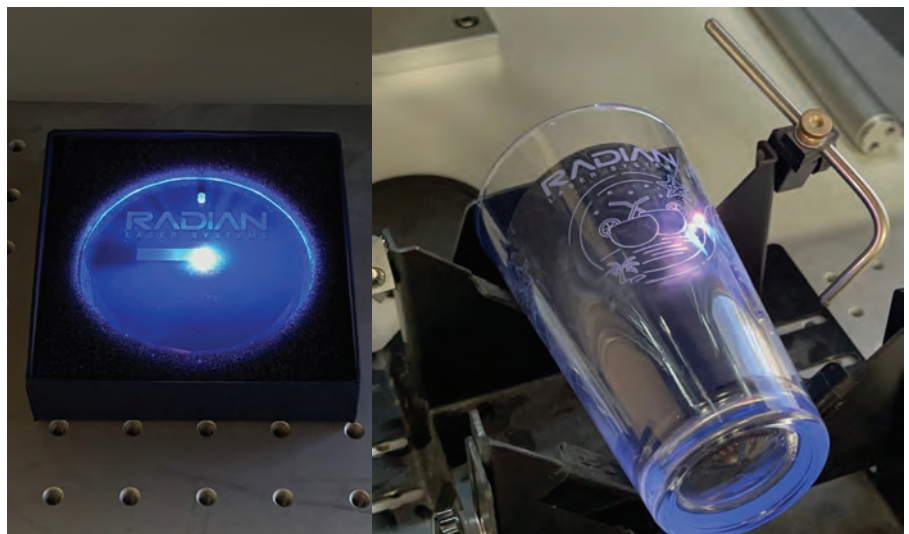
The UV wavelength and small spot size, combined with a galvo system, produce beautifully smooth, sharp contrast marks. UV systems are operationally more



efficient since marks can be done in several minutes (a fraction of the it takes with other methods). The only real disadvantage might be that the small spot size and short focal area requires that the item being engraved must be precisely

positioned to produce even marks. This is easily overcome by using good fixturing and proper training.

UV lasers are going to be the primary method of engraving glass in the near future. **GP**



## Choosing the Right Rowmark Material

COURTESY OF ROWMARK

When it comes to engraving plastic, it can be overwhelming to sort through all of the available options in the market. From the different resin types, to what's safe for a laser engraver, to specialty products and care and maintenance, there are a lot of factors to consider when choosing a plastic material to fabricate.

### Acrylic vs. ABS

There are two main types of plastics used in the engraving process: acrylic and acrylonitrile butadiene styrene (ABS). Both ABS and acrylic sheet are typically manufactured by extrusion, which allows for a wide range of thicknesses, ranging from 1/32" up to 1/8" or thicker. Acrylic can also be manufactured through the casting process, which produces an optically clearer sheet that comes in thicknesses starting at 1/4".

ABS and acrylic both have their advantages and disadvantages when it comes to engraving. The choice depends on the specific application, the equipment used to engrave the plastic, and the desired results.

### Interior vs. exterior

Both ABS and acrylic plastics are commonly used for outdoor applications due to their durability and resistance to weathering. However, the choice between the two depends on the specific requirements of your project.

ABS plastic is known for its toughness and impact resistance, making it an excellent choice for outdoor products that may be subject to physical stress or impact. It can also withstand exposure to UV light and extreme temperatures.

Acrylic plastic, on the other hand, is known for weather and scratch resistance. Also, depending on the manufacturing process, it can offer greater optical clarity than other types of plastic. It is

commonly used for outdoor applications such as signs, including backlit signage. Acrylic also offers the advantage of being laser engravable, which can offer a higher level of detail in engraving.

If you need a plastic that can withstand impact, ABS would be a better choice, while if you need a plastic that is weather-resistant, acrylic may be a better option.

### How do I know which Rowmark materials can be used for different projects?

Each Rowmark product line is marked with technology icons for each of the below

that tell you what the material is capable of: laserable, rotary engravable, front engravable, reverse engravable, ADA/tactile, UV-LED printable, indoor use, outdoor weatherable, UV stable, UL approval. GP



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## Point A to Point B

*Some points on getting to the engraving point with graphics software features*

BY JOHN MORMAN



John Morman is the owner of Celtic Tides in Lexington, Virginia. He and his wife, Mary Jo, have been running the shop since 2005. John started laser engraving in 2003.

**A**lthough I consider myself to be computer literate (probably fairly competent, in fact), I am a long way away from being some sort of Bill Gates when it comes to operating graphics software.

As is the case with all machinery, advanced or basic, each machine has its own parameters. When it comes to operating software, things are no different. For my own purposes, I have only ever dealt with one manufacturer.

On the industrial side of things in my previous life, I worked with three different manufacturers, each of which had their own operating software and, of course, each was similar but with important differences. I will assume, since I don't know any better, that engraving/cutting machines will be the same. Of course, as you step up in machine sizes, there are likely to be subtleties in operating software you'll need to familiarize yourself with.

I have always been fortunate to have machines where the operating software is essentially intuitive. It has never been that hard for me to figure out what I need to do. My first machine was equipped with a basic system for setting speeds, ppi, power, etc.

I have always had cutting tables and rotary adaptors, and my machines have all had the necessary software built in to handle those. I did have to refer to the operations manual originally to find references

for various material settings. Experience subsequently taught me when and where to adjust these settings to achieve the results I wanted.

My two newer machines have been equipped with much more inclusive software, with material databases included on a more advanced C.P.U. The display is more like the setup seen on larger machines, allowing you to select all your functions without having to refer to your manual. Of course, the software comes with a full package of diagnostic features as well as a package allowing me to check my calibration, software updates, etc. As always, trust your experience to change default settings.

In looking at other manufacturers, I've seen various options such as workspace illumination, camera systems, all controlled by onboard software, to name just a few.

All of this suggests that when you are considering a machine purchase you should get an in-person demonstration from an experienced operator so you can see the software features for yourself and see if what you're looking at will meet your needs.

### Tracing graphics

Creating your graphics for use can be simple or complicated. If your customer is providing a graphic, always ask if an editable version is available. This makes it much simpler to create different areas of shading, create or highlight margins and edges, adjust sizing to fit a work piece, and so on.

If you are given a simpler jpg image, it may be possible to use functions in your software to adjust tone, make details sharper, reduce noise, and so on.

If working with a photograph, my own experience suggests the simpler and sharper the photograph is, the easier it will be to convert into a usable image. There are several packages specifically produced for converting photos into engravable images. I've tried a couple, with mixed success.

Next, having the freedom to design your own graphic by working with a graphic supplied by a commercial source or found available online. Always be careful to look for any required attribution and trademark/copyright restrictions.

Some graphics are going to be ideal for immediate use. Others might require some form of manipulation to get to a usable image. While there are several ways to accomplish this, I have found that my favorite method is redrawing by tracing over the original.

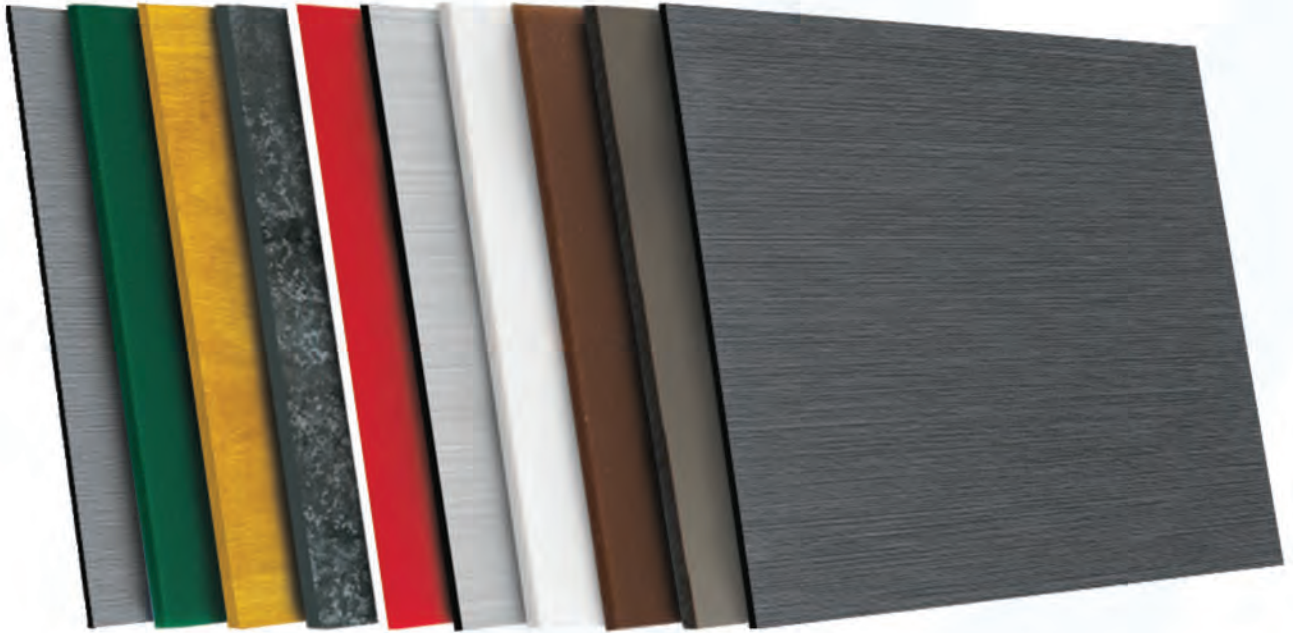
This provides several benefits such as being able to add or delete features, breaking the image into various sections (usually termed layers), which allows you to create shading, sharp margins, etc., as mentioned previously.

When I first started tracing, I went to almost ridiculous lengths to create exact sections. This took an inordinate amount of time, and time is money! I subsequently realized that I could follow the required parts of each section exactly, and then just finish the section roughly. Each remaining section can be specific where required, and less definite as necessary.

By adjusting the order of the various layers, the specific parts of each section can be brought to the fore. The result is a multi-layer graphic with defined margins.

I've tried to lean on my experience, however applicable that may be. I've developed my own way of working with the software

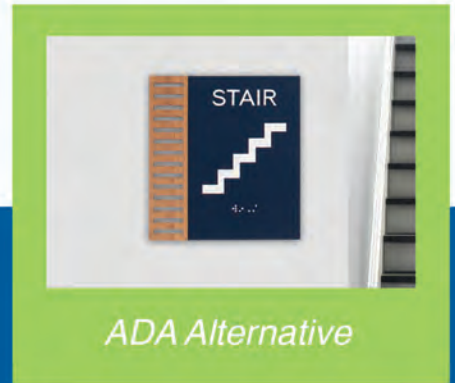
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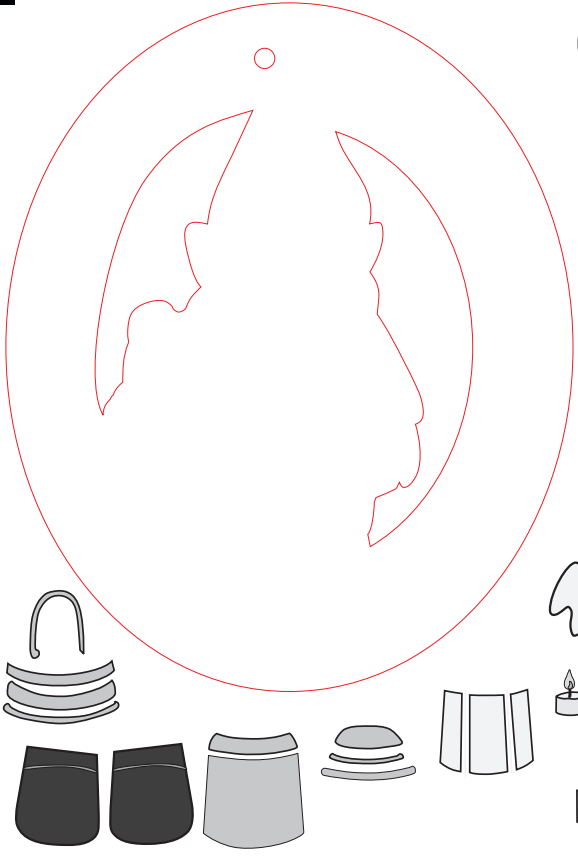
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I have. I don't claim that my methods will work for everyone; that my methods are the best, or that any piece of software is better than any other.

Only your own experience will show you the best software package for your machinery, and how best to use it to create your best results.

**Drafting controversy**

Now to what maybe the most contentious issue... your drafting software. My usual caveat applies here. It is not my intent, either written or implied, to talk negatively about any drafting software designer. If I use incorrect terminology, that is my error.

As I said, I have only ever used one laser engraving manufacturer. My first machine was set up such that the default graphic software required was an early version of CorelDRAW. Whether that was or is the case with other manufacturers I simply don't know.

Either way, I was fortunate enough to find the earlier versions of Corel to be really simple to use, and the longer I worked with it, the more confident I became in making adjustments with shading, edges, drawing curves, and so on.

As Corel has evolved, it has become a marvelous tool for advanced graphics designers. That being the case, the more advanced Corel has become, the more it offers, and "of course" the price increases accordingly.

I understand the reasoning... development costs money. To keep up to date, though, can become expensive. I have spoken to various Corel representatives on several occasions and suggested they provide a version of the software more suited for

engravers like us. There is other engraving-specific software, like EngraveLab, but again, I haven't tried it yet.

Corel does offer less sophisticated packages, but (strictly my own) research into these "lighter" versions suggests to me they aren't what I would need. Different folks may have their own opinions on this, and that is perfectly fine. Again, for the sake of emphasis, this is *not* a criticism of Corel.

In addition to programs available for purchase, I know there are some *open-source* packages available. I have spoken to some users who are happy with this option, and in fact a couple of different packages have been recommended to me.

I have a personal bias against *open-source* programs so have never tried them. (This is strictly my own bias and should not be taken by anyone as advice not to try them if wanted.)

In talking to several other users, the opinion is that Corel is a memory hog. Once again, other software may be equally greedy, given that graphic design software must require a lot of memory. The point is that you must ensure your computer has sufficient capacity to run a large program. **GP**



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# Get More Filter Life Out of Your Laser Fume Extractor

COURTESY OF CHAU VO, VP ENGINEERING & OPERATIONS, PAT TECHNOLOGY SYSTEMS INC.

**L**aser engraving applications and users are much more diverse these days. They're finding their way into non-industrial places like offices, retail spaces, R&D labs, and even homes. In these settings, filtering laser fume extractors are usually the most practical option. They pull the fumes directly from the laser, filter them out and recirculate clean purified air back into the room - no need for ugly ducts, loud fans, and possibly angry neighbors. All you have to do is replace the filters every so often to enjoy a pleasant working/living environment.

Although these machines are extremely easy to use, here's a tip that will make your filters last longer and save you money!

**TIP:** Set the lowest airflow possible (while still evacuating the fumes).

Here's how and why setting the fume extractor to the lowest airflow setting will maximize filter life:

- 1** Higher airflow creates a disproportionately greater air resistance in the filters. A lower setting achieves a more efficient use of blower power to generate the airflow.
- 2** Related to the above, higher-quality fume extractors usually have auto-compensation blower control systems. Power to the blower is adjusted automatically to compensate for any change in air restriction due to dust loading of the filters over time. For example, as dust loads the filter and airflow restriction increases, the controller will increase power to the blower to maintain the original set-point flow. So, let's say the blower is set to a low but sufficient airflow set-point to fully clear out the laser enclosure of fumes (ideal), this leaves enough blower power in reserve for the system to automatically increase the blower power and use filter capacity to its fullest extent. If you set the flow excessively high (more than is strictly necessary to extract the fumes), the system will have less power left to achieve the (unnecessarily high) set point, resulting in a premature activation of insufficient airflow alarms. Use the "5-second rule" to help you find that sweet spot in airflow. Start by setting your airflow so that you can see the fumes being

evacuated from the laser. Once the laser has finished a job, count 5 seconds and open the lid of the laser. If at this point you observe residual smoke and odor, slightly increase the flow and repeat the process until you find the Goldilocks setting. The process can be done in reverse too.

- 3** The chemical filter contains activated carbon and additives which treat the VOCs flowing.

through the filter. The process requires contact time between the VOCs in the airstream and the activated carbon/additives. Though the filter will adequately filter out these VOCs at any flow setting, the chemisorption and physisorption efficiency increases with longer contact times or slower airflow rates. This optimizes the capacity potential of the activated carbon/additives. **GP**



# Laser Cut LEGO Brick Stencils

COURTESY OF EPILOG

**K**ids and adults alike can really get creative with these laser-cut Lego brick stencils and letters. This type of interactive project helps foster imaginative play and can keep kiddos entertained for hours. Check out the video above or steps below to see how we brought this personalized and colorful project to life.

## Step 1: Setup

Open the artwork files and customize as necessary.

### Materials needed:

- Lego brick baseplate
- Epilog laser system

### Machine used:

Fusion Maker 24 30 watt

## Step 2: Send the job to the laser

After you've modified the artwork to your liking, insert your Lego brick material and focus the machine. You may need to test your speed/power/frequency settings prior to cutting. Send the job to the laser with the correct parameters for your machine/wattage.

## Step 3: Remove the cut outs

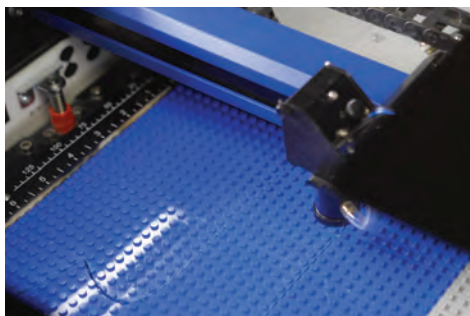
After your letters have been cut, remove them from the table bed.

## Step 4: Assemble

Adhere the cut letters or stencil backgrounds to the wall and decorate as you please!

## Where can you sell custom Lego brick kits?

- Children's stores
- Pediatrician offices
- Libraries
- Daycare facilities **GP**



# How to Laser Engrave Wood Products

COURTESY OF JOHNSON PLASTICS PLUS

One of the most common items to laser cut and engrave are wood products. Let's take a look at the steps you'll need to follow for laser engraving or cutting wood-based sheet products.

**1** Choose the type of wood. Different types of wood have different densities and hardness which can affect how they react to laser engraving. Woods with a consistent grain and no knots, such as maple or birch, tend to give the best results.



**2** Prepare your design in graphic design software. Make sure your design is the correct size and format for your laser engraver.

**3** Prepare the wood surface. Make sure the wood surface is clean and free of any dirt, debris, or oils that can interfere with the engraving process.

**4** Adjust the laser settings. Depending on the type and thickness of the wood, you may need to adjust the laser power, speed, and focus. A lower power setting is usually best for lighter woods, while harder woods may require higher power settings.

**5** Test the engraving settings. Before engraving the final design, run a test engraving on a scrap piece of wood to ensure the settings are correct and the design comes out the way you want it.

**6** Use a raster engraving method. Raster engraving involves engraving the design as a series of closely spaced lines, which produces a shaded or textured effect. This method is best for creating designs with gradients or shading.

**7** Apply masking tape. Applying masking tape to the wood surface before vector cutting can help prevent scorching or burning, and also make it easier to clean the edges of the material after cutting.



**8** Use air assist. Air assist blows a steady stream of air across the engraving surface to help keep it clean and cool during the engraving process. This can help prevent smoke or debris from interfering with the engraving.

**9** Clean the engraving. Once the engraving is complete, use a soft brush or cloth to remove any debris or dust from the surface. For non-sublimatable materials, you can also use a finishing treatment, such as oil or wax, to protect and enhance the engraved design.

**Please note:** To laser engrave or cut the products mentioned above, it's recommended that you check with the manufacturer for specific laser power and speed settings. **GP**



# Laser Engraving on Metal

COURTESY OF ROWMARK

**L**aser engraving on metal has become increasingly popular for its precision and durability. Understanding the intricacies of this art form can help you unlock a world of creative possibilities. In this guide, we will explore the fundamentals of laser engraving on metal and provide valuable insights to help you get started.

## Can you laser engrave on metal?

Yes, laser engraving machines have the ability to etch intricate designs, logos, text, and even photographs onto various types of metal surfaces. However, it's important to consider the type of laser and metal you're working with to achieve optimal results.

## What laser is best for engraving metal?

When it comes to choosing the right laser for metal engraving, CO<sub>2</sub> and fiber lasers are the top contenders. For metal engraving specifically, fiber lasers are the preferred choice. Fiber lasers emit a concentrated beam of light that interacts with the metal surface, resulting in precise and high-quality engravings. Their ability to mark different metals with varying depths and colors makes them ideal for metal engraving applications. For CO<sub>2</sub> lasers, a pre-coating spray is typically needed to laser etch metal like stainless steel.

## What is the easiest metal to laser engrave?

Stainless steel, brass, and aluminum are considered some of the easiest metals to laser engrave. They have a higher reflectivity, which allows for better absorption of the laser energy and creates clearer and more defined engravings. It's important to note that different metals may require adjustments to laser settings and

parameters for optimal results, so experimentation and test runs are crucial.

## What if I have metal that's not laser friendly?

Some metals, like uncoated stainless steel and brass, won't create a contrasting mark without some help. Thankfully, there are products like CerMark metal marking sprays and pastes that allow you to create that contrasting mark on metal with a laser.

Laser engraving on metal offers a world of creative possibilities, allowing you to personalize and embellish various items with precision and durability. By understanding the basics of metal engraving, choosing the right laser, and experimenting with different settings, you can unlock your artistic potential and create stunning designs on stainless steel, brass, aluminum, and more. Remember to practice, be patient, and never stop exploring the fascinating realm of laser engraving on metal. **GP**



# Get Ready for 2024

*Be prepared for what's trending in 2024, including sustainability, relaxed-fit styles, and a seasonal color palette*

BY CHRISTY SHELLENBERGER

Water-based printing can give a soft-hand, premium feel to garments.



Large, colorful prints are making a big comeback in 2024.



Having blanks on hand is an integral piece in sharing garment manufacturing stories with customers.



Christy Shellenberger is co-owner of Rock Hill Screen Printing in Rock Hill, South Carolina, hosts the Last Call for Plastisol podcast ([lastcallforplastisol.com](http://lastcallforplastisol.com)), and is on Gildan's Board of Decorators.

In the fast-paced world of apparel decoration, remaining at the forefront of industry trends is the key to success. For apparel decorators, staying ahead of the curve isn't just a choice... it's a necessity. As we stand on the cusp of 2024, a wide array of exciting trends are poised to redefine the decorated apparel landscape. These trends encompass everything from garment styles to design approaches, with sustainability emerging as a top theme that will shape the market this year.

### Sustainability takes center stage

In recent years, sustainability has surged to the forefront of garment manufacturing, production processes, and design. This movement has gained considerable momentum as environmental consciousness continues to grow among consumers.

Notably, social media has played a pivotal role in thrusting sustainability into the public consciousness, with individuals and businesses alike advocating for eco-friendly products and practices. For screen printers, recognizing and adapting to this increasing demand for sustainability is not just wise, it's imperative.

To meet the growing demand for sustainable apparel, garment manufacturers have made significant strides in using materials like organic cotton, recycled fabrics, and eco-friendly dyes. This shift in the industry presents a remarkable opportunity for decorated apparel vendors. Not only can we educate our customers about the merits of sustainably sourced garments, but we can also tap into a market that is increasingly willing to pay a premium for products that align with their values.

One shining example of a manufacturer that has embraced this trend is Allmade. Their dedication to sustainable practices, along with printer-friendly garments, resonates deeply with environmentally conscious consumers and decorators alike.

Additionally, Comfort Colors has made a notable contribution with its Clean Pigment Dye Process, which conserves



Sharing the production process on social media is a great way to build trust and keep your business in the forefront of your customers' minds.

Encourage customers to offer different colored blanks when collecting pre-sales numbers to increase numbers on bulk orders.

vital natural resources, including water and energy, while delivering apparel that is right on trend. Sharing these manufacturing processes with your clients can not only sell the end product but also build trust that will solidify long-term relationships.

### The appeal of relaxed-fit styles

While sustainability is a rising star, the enduring popularity of comfortable and relaxed-fit apparel remains a driving force in 2024, particularly among younger consumers. These roomy, easy-wearing garments offer an excellent canvas for eye-catching prints, and the best part is that catering to this trend doesn't necessitate an extensive marketing effort.

To cater to the demand for relaxed fits, screen printers may want to consider stocking up on oversized blanks and investing in oversized screen-printing equipment, such as larger platens. It's important to remember that streetwear consumers actively seek out what they want; our role is to anticipate their needs by offering the right blanks. Some favorites in this category include AS Colour's Heavy Tee and the American Apparel 2001.

Consumers are on the lookout for quality, including thicker collars, boxier silhouettes, and thicker yet still soft fabrics. When combined with water-based and discharged printing techniques, these garments deliver a soft, comfortable feel and exude a premium quality that appeals to a broad customer base.

Additionally, this trend opens up exciting design options for decorators, such as poster-like art with a vintage vibe and multi-method decorating. Decorators should be open to using direct-to-film



Mixing DTF transfers and embroidery designs on the same garment is growing in popularity.



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# ELEVATED BASICS

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transfers and direct-to-garment printing in conjunction with screen printing, embroidery, or embossing techniques to create captivating designs.

### Color trends for 2024

Consumers continue to follow the trend of changing color palettes with the seasons. Natural color palettes are more popular than ever, and this can be a tremendous advantage for screen printers.

Focusing your email and social media marketing efforts on these trends can encourage small businesses to expand their apparel offerings not only by style per season but also by color. Sending unrequested proofs with the colors of the season is an excellent approach to engage clients for repeat orders.

For instance, as we approach fall, shades like browns, maroons, and oranges are gaining in popularity. As winter sets in, we'll shift our shop's focus to blacks, greys, and timeless neutrals. When spring arrives, pastels will take center stage, while summer will show a continued love for vibrant, neon garments.

As we approach 2024, it's evident that the decorated apparel industry is poised for an exhilarating year ahead. Sustainability is no longer a niche concern; it's a defining factor in the industry's landscape. By offering sustainably sourced garments and staying attuned to the enduring appeal of relaxed-fit styles, screen printers can expand their reach and thrive in this dynamic and creative field. In 2024, we can look forward to exciting opportunities that will push the boundaries of our creativity and innovation. **GP**



The latest insight from industry suppliers Citadel Brands, JERZEES, Next Level Apparel, and SanMar on what they think are the hottest upcoming trends.

<https://gpro.link/apparel2024>



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# Don't Stop Playing

*Quick turnaround on a merchandise project for the Wyoming Senior Olympics*



At 21 years old, Lon Winters was the production manager for Ocean Pacific and started his 30-plus year career reclaiming screens. He's the president and founder of Colorado-based Graphic Elephants, an international consulting firm and apparel decoration studio specializing in screen printing technical advances, plant design, layout, troubleshooting, productivity, quality analysis, and complete apparel decorating solutions. Lon is also a presenter at GRAPHICS PRO EXPO (g-p-x.com).

The Wyoming Senior Olympics (WSO) promotes health and fitness for those over 50. Not to date ourselves, but this sounds like our kind of organization. The WSO is a member of the National Senior Games Association (NSGA). Wyoming is a qualifying state for the NSGA events.

The WSO is designed to allow those of us in our prime and older to compete in a variety of events. The games feature over 20 sports, including swimming, track and field, pickleball, tennis, golf, team sports, and more.

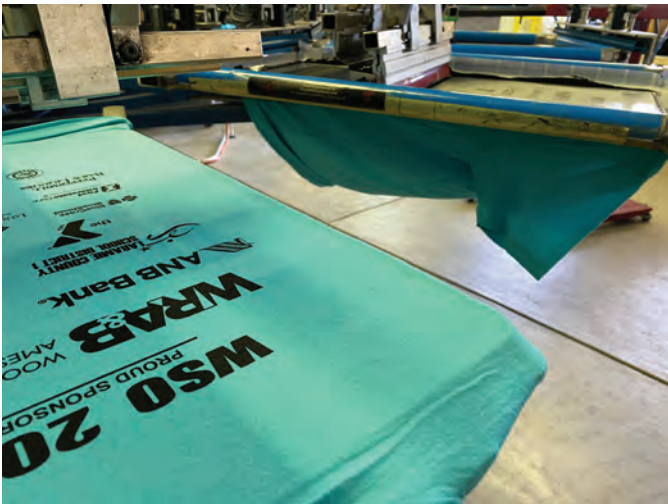
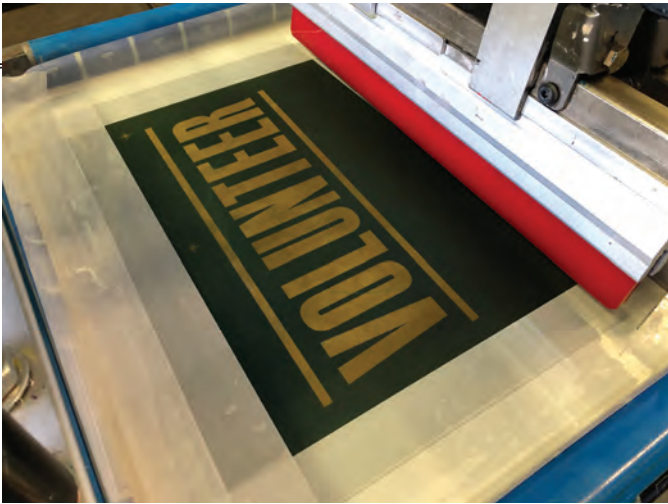
In 1985, a group of seven men and women formed the original leadership for what was known as the U.S. National Senior Sports

Organization. The vision was to promote healthy lifestyles for adults through education, fitness, and sport. With the help of individuals who were running games for seniors in 33 states, they planned the first National Senior Olympic Games in 1987.

The games were successful with 2,500 competitors and over 100,000 spectators. The next year, 3,500 seniors competed and received national media coverage. For about 10 years thereafter, NSGA called its signature event The Senior Olympics.

The NSGA exists today as a non-profit organization dedicated to motivating active adults to lead a healthy lifestyle through the senior





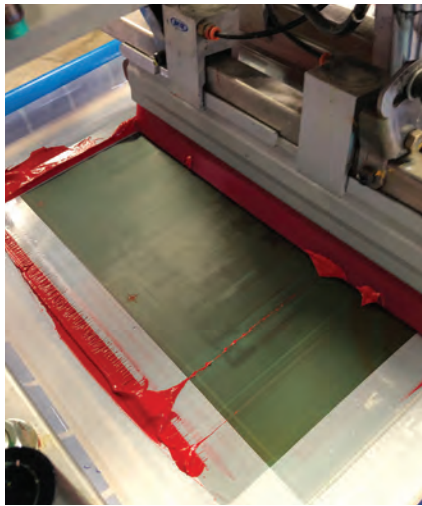
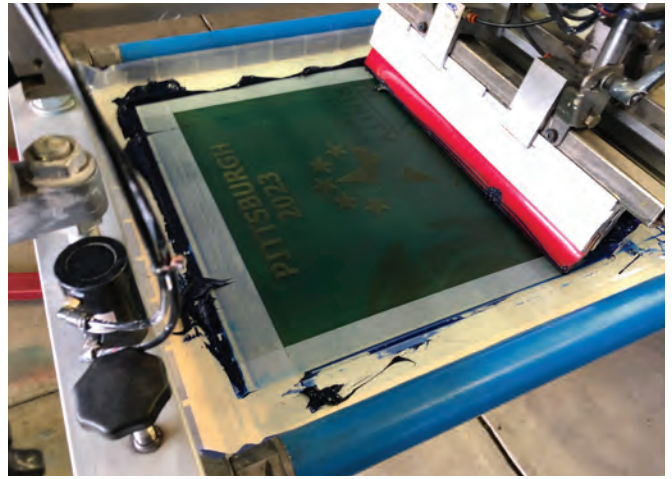
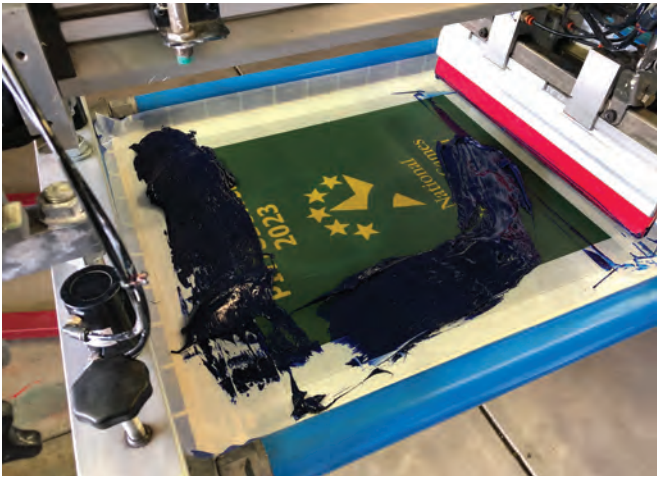
games movement. The Games, for men and women 50 and over, is the largest multi-sport event in the world for seniors. NSGA member organizations hold annual games with qualifying competitions in the year preceding from individual states.

The Wyoming Senior Olympic Committee supports the belief that participation in athletic events has a positive physical, psychological, and social benefit. The WSO, through the spirit of competition, promotes health and wellness for adults through a more active lifestyle and works to erase the myths of life ending after 50.

### 50-plus merch in a pinch

We had no idea until an old friend reached out for a project for the WSO. Sometime this spring, he asked us if we would be interested in providing the merch for the games. Of course, we were. We really didn't pay much attention and





should have probably followed up. Later this summer, we got the text. “Didn’t you get my email about the games?” Uh... no? “They start next week!” Of course, they do. So the fire drill began.

After rearranging our production schedule, we received the file as a PDF. The color theory was nice and simple with primary colors and white. There would be three different backs on for different colored tees. The participant shirts would be red and amounted to about 1,200 while the smallest run of lime shirts for the volunteers numbered only 24.

The fronts were all the same on the multiple colors. Or were they? Upon further investigation, we found they were not. A different setup on each color. Not ideal. Somewhat clever for design purposes, but not practical at all for production.

It wasn’t going to work. We opened the file in Adobe Illustrator. Though



Illustrator wasn't necessarily created for us screen printers, it does give us the power to maintain craftsmanship on a professional level. Clean, sharp, strong graphic, vector results for a simple, bold design.

Lucky for us, this was created using layers and, believe it or not, already in spot colors and fonts converted to outlines. Unusual, but nice. Easy breezy!

We would reconfigure and re-color all the outlines and colors to work on anything, like using navy and white for a dark or light edge. The client had no problem with these adjustments.

Since this wasn't a complex design full of halftones, it was a relatively easy white printer or base plate to build. But for it to run smoothly on press, we would need to add our chokes and gutters. There wasn't any reason to put a base under the navy.

Many times, we won't base darker colors for a nicer feel and hand on final

print. We added gutters between colors on the base that were butted next to each other to reduce movement, which reduces smearing.

We knocked the red in the base into a 50 percent halftone as well for the same reasons. The control over the white printer's chokes, gutters, and halftones were invisible to the eye, kept white from peeking out on the edges, and allowed us to run all wet on wet after a single flash.

Once seps were completed, we out-putted on CTS (Computer to Screen) with a frequency of 55 lpi (lines per inch) at our standard 22.5-degree angle. We ran the white on a 156 tpi at 35 N/cm<sup>2</sup> tension using 65/90/65 triple-ply dual durometer squeegee followed by a flash and smoothing heated iron.

Next, the RFU navy, red, and the high-light white all wet on wet on 230s at the same tension using 75/90/75s. The setup

was fairly simple using our registration system and went up in under 15 minutes. Just a couple of minor micro adjustments. Once set up, all ran well.

The Wyoming Senior Olympics was held in Cheyenne on Aug. 8-10 with 500 athletes competing, and it served as a qualifier to compete at the National Senior Games. Competitions were held in age brackets from 50 to 100+.

The 2023 theme, *Bridging Champions Through the Ages*, highlights the many ways these active, older athletes impact the generations. This theme highlights the NSGA's mission to promote well-being that goes beyond hosting athletic competitions.

The WSO hopes their examples inspire all aging adults to remain active for life, whether they choose to play a sport or do something else recreationally. **GP**

# Making Moves in 2023 and the Future

*Ensuring your shop can keep up with growing demands*



Howard Potter has worked in the promotional industry for 20 years, from designing to building brands and a family-owned business. He is the co-owner and CEO of A&P Master Images LLC with his wife, Amanda. Their company offers graphic design, screen printing, embroidery, sublimation, vinyl graphics, and promotional items. Howard, his family, and the business reside in Utica, New York. For more information, please visit [masteryourimage.com](http://masteryourimage.com).

**O**ur company not only had a new building completed, but we remodeled our original building some, and added our direct-to-film (DTF) printer. This is the most we have ever done in just one year, and the year is not over. We started looking at other ways to grow as well!

In January of this year, our builder completed our second building behind us that

is only 3,000 square feet. This building holds stock on the second floor and our staff's break room where they can hang out at lunch together.

The first floor holds a 20' wide by 62' long install bay for working on vehicles. The building also houses our 2D/3D laser engravers, our direct-to-film printer, our 54"/64" vinyl printers, both sublimation printers, and a design office. Having the extra space has been a huge help with vinyl installs as well as larger orders for the other processes we offer in the new building.

## DTF connection

Having the DTF process from ColDesi has been a huge game-changer for our company. We can handle so much more work faster than ever before, we're quicker to teach people to operate, have zero mess, and can train anyone to run the equipment and to heat press.

We rolled the process out slowly starting after two weeks of owning the machine, and we have already produced around 26,000 pieces, which sold for a total of \$288,000, an average of \$11.07 per piece. Our screen-printing department has run all year and we have produced 24,000 pieces for a total of \$316,000, or \$13.29 per piece.

So, between both processes, we have a combined total of \$604,000, and last year we didn't have DTF and did \$451,000 in screen printing alone. Many will look at how screen printing is still slightly ahead, but that is only due to not having DTF running at the beginning of the year and simply taking our time promoting it.

Since shifting so much work to DTF, we have cut back 60 hours a week on



In January of this year, our builder completed our second building behind us that is only 3,000 square feet. This building holds stock on the second floor and our staff's break room where they can hang out at lunch together.



The first floor holds a 20' wide by 62' long install bay for working on vehicles.

Most customers are switching to DTF for the full-color print and short runs.



Having the extra space has been a huge help with vinyl installs as well as larger orders for the other processes we offer in the new building.

cleaning, emulsifying, and burning screens. We are also not buying anywhere near the amount of supplies we used to for screen printing.

Most customers are switching to DTF for the full-color print and short runs as well, which frees our automated press up for larger runs of only one- and two-color imprints, which takes stress off our staff and makes us much more profitable on the auto and setup times.

The main thing you have to remember with DTF is you have much less setup time and you have more time to heat press orders to get them out faster, so you need to make sure your design team can keep up with how fast the process moves, which is a good problem.

Another factor is the cost to gain full color printing for all size customers. We have spent \$20,000 in supplies for the year so far and we still have stock, but let's say we did not. \$20,000 divided into 26,000 pieces produced equals \$0.77 per piece produced, and most had a front, left, and back at times.

Screen printing costs alone just in labor from prep to production costs more than that, let alone supplies.



Our second showroom wall graphic.





After getting our new building completed and our new DTF machine up and running, we had our builder go into our original building and do a remodel for the customer service team and our embroidery team, along with building out a second showroom.



### Intelligent expansion

After getting our new building completed and our new DTF machine up and running, we had our builder go into our original building and do a remodel for the customer service team and our embroidery team, along with building out a second showroom.

Last year, our company grew by 34%, which was \$750,000 in production, so our customer service team needed more space to work so we could hire more staff. We are now up to six full-time customer service reps, and we are looking to get to ten by the end of next year. This has helped our customers place orders faster and sped up the pick-up times if they stop in to get their orders.

Due to the growth in our first responder sales for uniforms, our embroidery team needed more space for sewing, so we repurposed our old heat press room for not only sewing, but creating room for ship outs as well. Now, the team isn't tripping over each other to get work done in the same space.

The last piece to be finished in the remodel was the second showroom dedicated to first responders. The space has over \$20,000 in samples for them to try on, space to meet with a customer service rep, and two dressing rooms. This space has been a game-changer for customers and more inviting to their needs.

I know what you're thinking: how did you pull off all of that and keep focused at the same time? One, my wife and I work

80 hours a week, and secondly, we have a great team that cares as much as we do every day and steps up at every chance.

That aside, we have looked to the future and started doing more research. Our goal is to offer more in-house services than any company in the United States. Did you notice something I didn't say? We aren't interested in being the largest. We're focused on our quality, customer service, and turnaround time.

Several promotional companies are struggling to meet production due dates, quality slipping, and shipping companies not getting any better. Over the past five years, all three issues have continued to spike, and we sub out around \$500,000 a year in work for orders we do not have the equipment in-house for, so we started researching equipment options.

One is a UV laser that will allow us to laser engrave on the surface of glassware and so much more. With just one machine, and depending on the size of the design, you can average 50 to 72 pieces per hour in production, which is a minimum of 400 pieces per day. Not bad at all!

After researching that machine, I went into researching UV printers to be able to print full color onto several different types of materials: pens, golf balls, padfolios, signs, and more. These last two pieces of equipment we're ordering are going to allow us to take almost 98% of the work we sub out and bring it all in house to keep our team busy and growing, which also allows us to handle more rush orders and turn a profit faster with no middle-man holding us up.

In the future, you will see fewer distributors doing this type of work if the manufacturers they're relying on cannot meet the due dates. This will cause their customers to go elsewhere, and several manufacturers already have sister companies that are going direct to the customers, so this is where you have the advantage if you are willing to do the extra work by bringing the print processes in-house. Yes, it is more work, bigger risk, but also with all of that comes a bigger reward for you and your team! Keep making moves, everybody! **GP**

# NEW PRODUCTS

For more on the suppliers featured in this section, please see website and phone information following each product.

## HOLLOWAY JACKET

**Carolina Made** offers Holloway's Repeve Eco Jacket for men and women. The product features 100% poly MicroTec woven face with a water-repellent finish, recycled poly quilting, and a media port inside. It is available in six colors and sizes ladies' XS to men's 3X.

**800-222-1409**  
**carolinamade.com**



## DESKTOP PRINTER/CUTTERS

**Roland DGA** introduces its new VersaSTUDIO BN2 Series desktop printer/cutters, the BN2-20 and BN2-20A. Both versions have print speeds that are four times faster than previous models, according to the company. The BN2-20 prints in CMYK+White and the BN2-20A prints in CMYK only.

**800-542-2307**  
**rolanddga.com**



## DOMED STICKERS

**Stickers International** offers 3D domed stickers, with a range of options in epoxy resin gel. The product comes in a range of metallic vinyl options and can adhere to most flat, dry surfaces and are water- and scratch-resistant, according to the company. The product can come in sizes of 1/2" x 1/2" to 9 1/8" x 9 1/8".

**800-766-0448**  
**stickersinternational.us**



## WRAPPING FILM COLORS

**Avery Dennison** introduces its fall 2023 Celestial Satins color collection, which

adds three new colors to the company's Supreme Wrapping Film ColorFlow film series. The new colors are ColorFlow Satin Solar Dawn, ColorFlow Satin Moonstone, and ColorFlow Satin Frozen Ocean.

**440-534-6000 • averydennison.com**



## RECYCLED TEE

**BELLA+CANVAS** announces its 100% recycled EcoMax Tee, which is made of pre-consumer scraps of 100% Airlume combed and ring-spun cotton with dope-dyed polyester from recycled post-consumer PET bottles. It is available in white, black, and navy.

**855-363-2200**  
**bellacanvas.com**



## CORPORATE AWARDS AND GIFTS

**JDS Industries Inc.** offers the Premier Platinum Glass, Razor Glass, and Sierra Glass options for corporate awards and gifts, all of which are available in multiple styles and sizes. The company has also expanded its Laserable Leatherette gift line with purple/black and white/black colors.

**800-843-8853**  
**jdsindustries.com**



## UV-LED ROLL-BASED PRINTERS

**Mimaki USA** announces the launch of the UCJV330 Series of cut-and-print UV-LED roll-based printers for signage and graphics applications. The product has a newly developed ink ejection technology, can print clear ink as gloss or matte, and has support for up to five-layer printing, according to the company.

**888-530-4021**  
**mimakiusa.com**



## REMOVABLE ADHESIVE FABRIC

**HP** offers its HP Recycled Removable Adhesive Fabric, 3-in Core (Latex/solvent), which is made with recycled water bottles and coating materials for Original HP Latex, solvent, low-solvent, and UV-curable inks. The company says it has a water-based, repositionable adhesive that doesn't harden over time and can be mounted on indoor and outdoor services without leaving a residue.

**800-407-4005**  
**hp.com**



# Turn Your J.O.B. into a Business You Love

*How to get more fulfillment out of your work*



Aaron Montgomery is certified by New York Times best-selling author Jack Canfield as a Success Principles Trainer and has nearly 30 years of experience providing essential support to small businesses. His company, Our Success Group, assists with setting and reaching goals, creating a solid business plan, knowing their numbers for a better pricing strategy, and establishing a customer-focused approach while devising a targeted marketing strategy. He is the author of the business foundation book 'The FUNdamentals of Business Success.' He is the Co-Founder of a facilitated 6-month Mastermind collective called Radical Goal-Getters. You can also find him hosting a weekly show called Small Business Saturdays and co-hosting the 2 Regular Guys Podcast.

**Y**ou've taken the plunge and started your own business, and the initial excitement has gradually faded. You might find yourself overwhelmed and underpaid, with long hours and little to show for the time you have to spend away from your family working on your business.

This is a very common scenario that I have seen play out for the 23+ years I've been in this industry, and finally, I've had enough of watching good people struggle. So why is it that so many people start their businesses and then feel stuck?

What I discovered was that the common denominator was a lack of foundation. No business plan, lack of processes and procedures, little understanding of who their ideal customers were, and the worst was not even knowing why they started the business other than to make money.

When I was working on my success principles certification, my mentor, Jack Canfield, coined the term J.O.B. (Just-Over-Broke) to highlight the jobs people had that just didn't fulfill them and make them feel successful. That sparked the realization that the struggling small business owners didn't start a business; they just created a new J.O.B. for themselves where they now had all the responsibilities, but with no security.

I realized at that moment that helping people get from a J.O.B. to a business they love was my calling. And the great news is the process is simple. In this article, I want to share with you how to determine if you have a J.O.B. and what changes to make so you can have a business you love instead.

## **More than a J.O.B.**

First, let's clarify that having a job is not inherently bad. For many people, a job provides stability and fulfillment. At the end of

the day, what most of us are after is fulfillment, and that equates to success.

However, the issue arises when entrepreneurs find themselves in a business that resembles a soul-sucking job that is not fulfilling and steals all their available time and resources. So, if your business is at your idea of success, you feel fulfilled and like you are heading in the right direction, then you probably don't need to read on. But, knowing business owners like you, you will read on as you are always looking for ways to strengthen your foundation.

In a J.O.B., you may be broke emotionally, spiritually, financially, or some combination of all of them. Your focus is often on fulfilling someone else's dream at the expense of your own. You're trapped in a cycle of trying to please everyone while doing work that doesn't align with your core values.

But again, the process for changing this is simple; it just isn't always easy to implement as it takes an uncommon mindset and a willingness to do things that might go against the grain of what you have been taught. You have to be proactive, learn to say no, and utilize some other strategies we will talk about later in the article.

Allowing your business to become a job comes from excessive people-pleasing, not clarifying your deeper reason for starting your business other than to make money, and having goals that are what someone else wants or what you think they should be to look good in the eyes of others.

So, ask yourself: do you work with the types of customers and people you love doing business with? Is that something you can choose, or are you desperately searching for anyone who has money? Is your business only about making money, and therefore you are always focused on the results instead of the growth? Are you chasing the idea of a business that



## A **business mindset** integrates the business into your life, offering a holistic approach to work-life harmony.

is someone else's ideal of success? Maybe some loud guy you follow on YouTube is yelling at you to do more, so you think that is success? Ultimately, are you asking yourself enough *why* questions?

First, get comfortable with the truth that success can only be defined by you at your core, not by the stories we were given since we were kids. It's like the kid who wants to be an artist, but their parents insist on them becoming a doctor, a lawyer, or some other more "secure" profession.

That story has been told in our culture, but other, less obvious stories are fed to us too. "You have to make a certain amount of money." "You have to do this or that to look successful to your neighbors." Take a moment and just ask yourself what success specifically is to you.

Once you are clear on that, it's time to look at what a business you love is all about. A business you love is fun and rewarding. It's fun because of the types of people you are around and your shared values. You are secure in your core beliefs and values and know living those will shine through.

Also, your business goals will be rooted in the difference you can make, not the money you make. A business you love grows from your ability to share your gifts with others. The results show up as a reward and are part of improving the processes.

Again, success can only be defined by you, and once you allow yourself to go deeper inside, I believe you are going to see the desire for fun and passion as well as serving the needs of the community that matters to you.

Transforming a J.O.B. to a business you love all starts with adjusting your mindset.

A *job mindset* puts you in a silo, clocking in and out without deeper engagement with the fact that a business is just part of who you are.

A *business mindset*, on the other hand, integrates the business into your life, offering a holistic approach to work-life harmony. You are not 10 different parts of your life. Instead, you are one person who might have interests and responsibilities for your health, community, family, partner, love, growth, spirituality, career, and finances. Balance is focusing more deeply on different areas when they need attention and nurturing and celebrating the areas that are strong.

Once you have made the decision to look at your business through a different mindset lens, then you can start taking some deliberate actions. Creating a business you love requires deliberate action by embracing your passions, implementing systems, setting boundaries, and making investments in the future of your company.

You embrace your passion by directing your energy toward the people and tasks you love to associate with. If you're working on something that lights your inner fire, you'll naturally devote more effort and care to it. Start by making a list of tasks you enjoy, as well as things you could do without. This will help you delegate the tasks that drain your energy, letting you focus on what you love.

Next, make sure your business is made of repeatable systems. Without systems, you're just flying by the seat of your pants. Having systems in place streamlines your workflow, ensuring every action you take is aligned with your business goals.

Set boundaries by learning how to say

no. This is a tough one for most of us, as we've been taught to seize every opportunity that comes our way. But this is a trap. By saying yes to every opportunity, you may end up spending time on less impactful tasks instead of focusing on the ones that truly matter.

Invest in your future by continually learning and growing. Don't stagnate; there's always something new to learn that can contribute to your business' success. Attend workshops, read widely, and consider hiring mentors and advisors to guide you.

To close, I'll share an inspiring anecdote from my own experience. During a group discussion with our Radical Goal-Getters Mastermind, one member was stuck in a J.O.B. mindset. Over six months, we saw her transform her entire business model to align with her core values.

By the end of the program, she had quit her day job and was running a fulfilling and successful business that she absolutely loved; the business she had always dreamed of, but didn't believe was possible.

So why not make today the day you decide to make a move toward the business you love? Remember, the difference between a J.O.B. and a business you love is not just in the work you do, but in the mindset you hold.

Transforming from one to the other requires the courage to embrace your true self, the wisdom to set your own course, and the discipline to stick with it. You have the power to make your business a joyous expression of who you truly are. The process is simple, it just requires an uncommon mindset and deliberate actions. You can do it! **GP**

# Regard, Remark, Reward, Repeat

BY EDDIE HILL

*Developing a corporate awards and recognition program beneficial to you and your customers*



Eddie is a No. 1 Amazon international best-selling author, speaker, consultant & entrepreneur, and owns multiple successful businesses, including Award Masters and Prosperous Internet Marketing.

I was sitting at the local chamber breakfast with a couple hundred business owners and executives. Since I was the new guy, I got the honor to introduce myself and give my 30-second elevator speech.

Here's what I essentially said: "My name is Eddie Hill. My wife and I are the new owners of Award Masters Inc., which has been proudly serving our community since 1981." The emcee said, "Oh, you guys sell trophies." I said, "Yes, we do! Trophies are seven percent of our business." Then I sat down.

This obviously peaked everyone's curiosity because they were wondering what the other 93 percent was. I got inundated with questions after the meeting. Of course we sell trophies, but the bread and butter of our gross income is from corporate awards and gifts.

## Defining and refining corporate awards

Let me define what a corporate award is. A corporate award is simply a personalized item that recognizes someone in a business setting. Corporate awards are most commonly used to recognize years of service, employee of the month, sales awards, customer service awards, customer appreciation awards, safety awards, retirement awards, among others.

Before I tell you what to sell and how to sell it, I want to persuade you on why you should sell corporate awards...

**Maximum gross profit:** For my shop, the average order size and net profit of corporate awards is 200-400 percent higher than that of sports awards. Margins matter and especially in today's business environment we need to maximize the profit on each sale.

In my shop, we place the items with the highest margins in the prime display locations. There are some pieces of crystal that have a very high perceived value that allow us to mark it up more than the average.

And vice versa, if we have a multifaceted piece that is hard to make and expensive to buy wholesale, I place that item on the bottom shelf or get rid of it completely. When we get a new piece of crystal or acrylic, I always ask my customer service reps how much we should sell it for. They have no idea what my cost is; their opinion is based on perceived value.

I realize most business owners mark up items based on a multiple of the wholesale cost. That could be your starting point,



Unique custom vase that can be personalized.



Beautiful acrylic award with piano wood finish stand.

but you should take advantage of the opportunity to get more margin. I also hold more inventory of the higher margin items. I tell my reps which ones we have in stock, and which ones we have to special order. Inevitably they will sell more items that we have in stock, which is a win all around.

**Lower labor cost:** The labor to produce corporate awards is usually much lower than sports awards. Once the corporation picks their awards, they usually stick with the same one for years, making it easy to change out the name and date and produce.

Templates and jigs allow us to speed up production, minimize waste, and lower labor costs. Most crystal and glass awards now come in their own box already glued, which makes it easy to decorate, clean and put back in the box.

**Monthly recurring revenue:** Most corporate awards are given out throughout the year, not just during busy season. Many programs like sales awards and employee of the month awards are given every single month. Even years of service awards are given out in the month of their anniversary.

My favorite programs are what I call *white label fulfillment*. For instance, we have realtors that every time they sell a house, they email us a photo of the new owners in front of their new house.

We engrave a photo frame that says *Congratulations on Your New Home* with their name and date. We put it in a box with the realtor's letterhead and ship it blind to their customer. Some realtors sell 5-10 houses a month, which adds up quickly.



Gavel plaques for past presidents and executives.



Selection of art glass and the many unique shapes and colors.



Perpetual Plaques for monthly recognition programs.



The unique shapes of acrylic awards.



Optical crystal awards.

My friend owns a mortgage company and sends a monogrammed cutting board to every new client. He does 30-50 mortgages a month. I love those types of orders! They come in like clockwork.

### What you should sell

I alluded to the different corporate programs earlier. Selling a nice piece of crystal one time is wonderful but selling that same piece every month to that business is fantastic! You are not trying to sell just a one-time award; you are selling an ongoing recognition program.

Programs are long term and recur consistently, usually monthly, but maybe quarterly or at least yearly. A lot of our programs started from a human resource officer just wanting one award. After a brief discussion about the different types of recognition programs, they now buy

awards consistently. It's our job to sell them on the benefits of a consistent recognition program.

According to a study by Society for Human Resource Management, over 91 percent of HR professionals believe that recognition and rewards make employees more likely to stay longer with that company. I personally think that's a *no-dub* statement, but there's the study to back it up. Of course, recognition increases longevity; it also increase engagement — the two things most corporations are concerned with. We have the power to help them.

The personalized items in these programs can be one of the corporate award staples like crystal, glass, acrylic awards, and plaques. But the longevity of the recognition program can be dramatically lengthened with the uniqueness of the award.

For instance, if you created a full color custom acrylic that's cut out in the shape of their logo, the odds of them sticking with the program for a long time is much higher because it's their own unique award.

Also, these days with many workers working from home, they don't have a public place to display their awards. In this case, it might be better to sell them *functional* awards. Functional awards are simply items they can actually use in everyday life. It could be a nice wine box set, a personalized clock, a personalized watch, or something as simple as a high-end engraved pen, personalized tumbler, or a personalized notebook.

We have several large customers that allow the employee to pick their personalized item from a list we gave them. The employees love getting to choose their personalized item.

### How to sell corporate awards

It's our job as a recognition expert to help our customers with recognition programs. Many companies are looking for ideas to increase employee engagement and employee retention.

It's my contention that there isn't a better way to do that than employee recognition programs, whether it's performance-based awards, service awards, or even team awards.

Here's a quick rundown on how to run an employee recognition program. Simply use the *4 Rs*. Regard, Remark, Reward, Repeat.

**Regard:** to make note of (something) through the use of one's eyes. As management training master Ken Blanchard says, "Catch people doing something right". For the program to have the greatest effect on behavior, you must define exactly what behavior you are looking to reward.

If you see someone doing something extraordinary or doing above and beyond activities, make a note about the specific details, because you will use them for your speech when you give out the award. That leads me to the next R...

**Remark:** a briefly expressed opinion. When you give the award to the recipient,

be very detailed in explaining the exact behaviors they did to receive the award. The specifics will give extra accolades to the recipient, and a path for those who will be vying for the award next month.

**Reward:** After your remarks, present the award. The perceived value of the recognition is in direct proportion to the fanfare of giving it. Let me say that another way: The bigger deal you make in giving recognition, which includes the award itself, the bigger the value that is placed upon the recognition. That's why they roll out the red carpet for the Oscars and that's also why the Oscar award is 13.5" tall and weighs a hefty eight and a half pounds, because it's triple-plated with copper, nickel and then 24-karat gold. The closer you get to those specs, the better your rewards program will be.

At the very minimum, all recognition should be done in public, especially in



Optical crystal with blue crystal accent.

front of their peers. If you want to step it up, have a meal. And if you really want to amplify the recognition, have an off-site event with a band, emcee and maybe even a magician! (Red carpet is optional.)

**Repeat:** Do it again. For any program to work you must be consistent. As Bruce Lee once said, "Long-term consistency trumps short-term intensity." Keep the fire going, be proactive in asking who the next month's recipient is. Make it easy to do repeat business with you.

So, now you know why, what and how to sell corporate awards. The only thing left to do is take action. Set a goal to contact ten new businesses per month, start with the largest in your community on down. Introduce yourself as a recognition master (some of us actually hold that title). Let them know that you can help dramatically increase employee retention and engagement. You will soon be able to say that trophies are seven percent of your business. **GP**

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# Fit to Path

*Getting your text to line up just right*



Doug Zender has used CorelDRAW extensively since version 4. His goal is to minimize the intimidation of the program and give users the sense that CorelDRAW is a friend, not an adversary. Doug began as a design artist, then moved into the sign industry in 1992, doing vinyl graphics. Doug always welcomes questions, comments, insights, and general chit-chat about CorelDRAW. You can contact him at dezender1@gmail.com.

Some users have expressed a bit of confusion as to how the *Fit Text to Path* works, and I hope to clarify some of that confusion. I will also try to explain the use of *Fit Blend to Path* in the following examples and steps to reach that goal for each of these concepts.

My first example (see **Figure 1**) was inspired by a lapel pin that I received from the Veterans Administration.

The re-creation of this pin in CorelDRAW was straightforward using the tools available in the program. I first drew a circle using the ellipse tool with the control key held down to get a perfect circle. I then typed the words *VIETNAM WAR* in all uppercase letters.

There are a couple of ways to get the lettering to follow the arc of the circle. You can select both the text and the target object and choose *Text > Fit Text to Path*, and they are automatically linked.

The text appears at the top of the circle. To move it, you must select only the text. You may have to click on it a couple of times. Alternately, and a little quicker, select the

text, choose *Fit Text to Path*, and drag it to the circle.

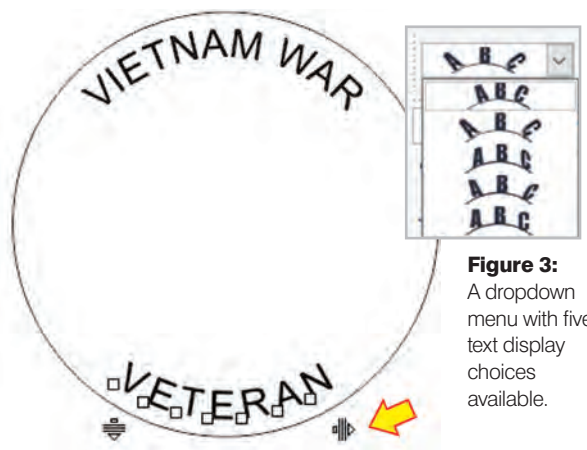
When the text is horizontally centered, a small red line appears. There are some settings and adjustments that we'll look at a bit later. I want to add the word *VETERAN* to the bottom of the circle in the same manner as the top lettering.

A couple of things to notice: the text appears upside down and backward, so on the taskbar are two icons to mirror the text vertically and horizontally, which will put it in the proper orientation. You'll have to move it to the desired location. The text letters also look a bit crowded together, so extending the kerning will correct the appearance. This is done with shape tool by dragging the little herringbone arrow as seen in **Figure 2**.

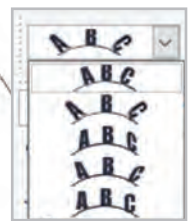
On the taskbar, when *Fit Text to Path* is selected, are several options to configure the appearance of the text. In **Figure 3**, there is first a dropdown menu with five choices. The first is the default and is most used. The next adds slight kerning to the text. The third



**Figure 1:** This example was inspired by a lapel pin that I received from the Veterans Administration. Images courtesy of Doug Zender.



**Figure 2:** If text letters also look a bit crowded together, extending the kerning will correct the appearance.



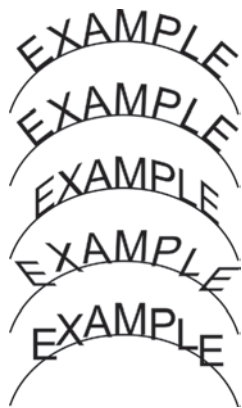
**Figure 3:** A dropdown menu with five text display choices available.

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**Figure 4:**  
An example  
of each  
choice.



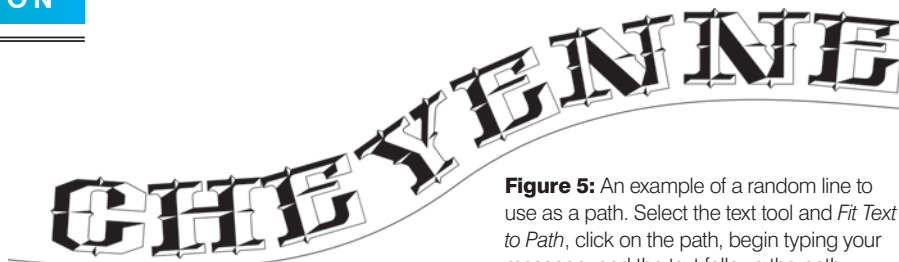
**Figure 6:**  
Another  
example  
of using  
*Fit Text to  
Path*.



**Figure 7:** A design I did some time ago for a Law Enforcement Training facility.



**Figure 8:** Right  
click on the blend  
group and drag it  
to the path.



**Figure 5:** An example of a random line to use as a path. Select the text tool and *Fit Text to Path*, click on the path, begin typing your message, and the text follows the path.

one tips the letters inward, the fourth tips them outward, and the final choice restrains all letters to remain vertical.

**Figure 4** shows an example of each of these choices. Next to the dropdown menu is a *Distance From Path* indicator that allows one to enter a specific value. Following that is an *Offset* option that allows one to move the text relative to the beginning of the path by entering a positive or negative number. Then, there are the two horizontal and vertical mirror buttons.

When I had the text just the way I wanted it, I proceeded to add color fills and details using a clip-art eagle head image and several other effects that I have discussed in some previous articles. The row of stars was created using a blend that was then fit to the path. I'll explain this a little further on. But first, another possibility, seen in **Figure 5**. I drew a random line to use as a path. Select the text tool and *Fit Text to Path*, click on the path, begin typing your message, and the text follows the path.

**Figure 6** is another example of using *Fit Text to Path*. I received a Word file containing the photo and lines of text and was asked to create a memorial card for family members of the deceased couple. I copied the photo and text to the clipboard and pasted the photo into CorelDRAW, which I power-clipped into an ellipse. To get the text into CorelDRAW, I chose *Edit > Paste Special > Rich Text*. I then proceeded to complete the card design.

**Figure 7** is a design I did some time ago for a law enforcement training facility. The text on the circle was created as described earlier. To get the look of rivet heads on the shield, I first drew the basic shield shape. I then drew a small circle and gave it a radial fountain fill, then duplicated it and moved the duplicate a distance to the right.

I selected both of these, and with the *Blend* tool, chose a 10-step preset direct

blend. Since I didn't know how many rivets would fit the shield shape, I added two circles to the blend for a total of 12.

The next step is to right-click on the blend group and drag it to the path. In this case, the path is the shield shape created earlier (see **Figure 8**). At this point, a small dialog box appears with the option to *Fit Blend to Path*.

The blend group appears as a cluster; look for the icon *More Blend Options* on the taskbar and choose *Blend Along Full Path*. This will distribute the blend objects evenly along the perimeter of the shield shape, but in my case, they didn't appear quite as expected, so I added objects one at a time until it all came out symmetrical. The final number of rivets ended up being 18.

(**Note:** I have found that different versions of CorelDRAW are more accurate than others with this operation. The original design was created using the X3 version without any problems, but when I tried to duplicate it in X7, it came out a bit different, not aligning objects evenly with the path. The 2022 version was largely different. Maybe using the Object-Color accelerator in the blend dialog would help correct it. Otherwise, objects may need to be moved manually to get it visually correct.)

Once I was content with the way the rivets displayed, I broke the blend apart and created an inside and outside contour of the shield and combined them. Then, I began adding details using some fountain fills, bitmap fills, and transparencies to reach the final image. To output the final image for print, I converted it all to a high-resolution bitmap to avoid any print spooler problems.

All of the above descriptions are fairly clear and obvious, but some users may have questions about a few of the details, so I am able to answer questions, hear insights, and hear some successes of CorelDRAW users at dezender1@gmail.com. **GP**

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