

Put your sign on their building with Photoshop

Giving the customer a preview of their sign can be a powerful sales tool

By Mike Jackson

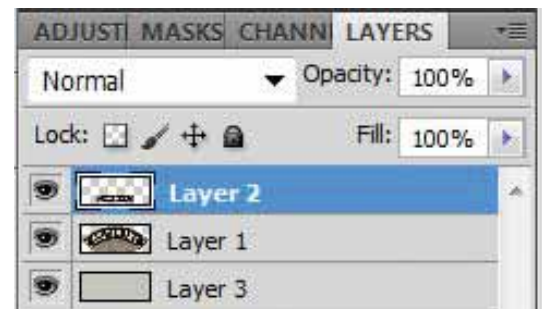
Some sign shops take an extra step in the design and sales process to make a photographic mock-up of the client's sign—showing the sign design as it would appear on the building or vehicle. As I write

this, the first thing that comes to mind is whether this step is necessary to make the sale. Is it simply wasting time that is either paid for by the client or is absorbed into the monthly overhead? Can you make the

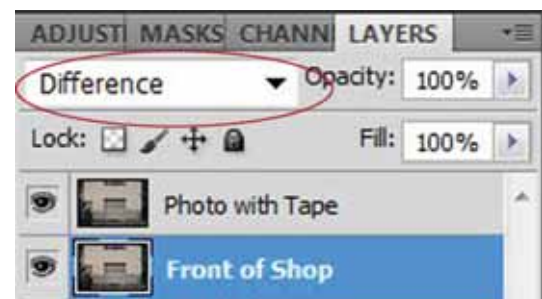


1. For this layout, I used a couple of the new panels in the Saratoga Collection (www.goldenstudios.com). I designed it in Gerber Omega and exported the parts as Adobe Illustrator. I imported them into a Photoshop document and added some color on the two panels. The background layer was filled with a beige gray color that approximated the front of the building. I cropped my design to the edges of the panels.

3. This image shows the front of the studio where I might want to place a sign. I set up a tripod in the driveway and got ready to take two shots. I knew the sign would be six feet long, so I found the center of the garage and put down a piece of duct tape on the top trim, then moved over and put another piece of tape three feet on either side of that. I took one photograph with the tape. Then I removed the tape and shot it one more time without moving the tripod between shots. In Photoshop, I opened the one without the tape first, opened the one with the tape, copied (*Control-C*) it to the clipboard and pasted (*Control-V*) it on top of the first one. The pasted image will be imported as a new layer automatically.



2. This screen capture shows how I layered this design to make it easy to transfer later. Keeping the design layers separated from the background helped here, but wasn't essential to the process. This image will be needed later in the process. When I was ready, I turned off the eye icon on the background layer and did a *Copy Merged* from the *Edit* menu.



4. In my case, the two images were almost identical so I didn't have to do any adjustments. For someone taking the two photos without a tripod, one method is to change the layer mode from *Normal* to *Difference*. Then select the *Move* tool and use the arrow keys to nudge the top layer around to match as well as possible. Newer versions of Photoshop have a command called *Auto-Align Layers* under the *Edit* pull down menu. *Shift-Select* the two layers in the layers tab and use the command.

same sale without taking this extra step and spending the time?

Okay, let's assume the job justifies the effort. Now what?

Essentially, there are three steps. Step one: Prepare a sign layout in which the design is on a transparent layer. Step two: Take photos of the building, vehicle or subject, including some size reference photos. Step three: In Photoshop, combine all the parts and resize the image to fit the appropriate area on the building or vehicle.

Prepare the layout In most cases, the sign size is already established during the initial sales step.

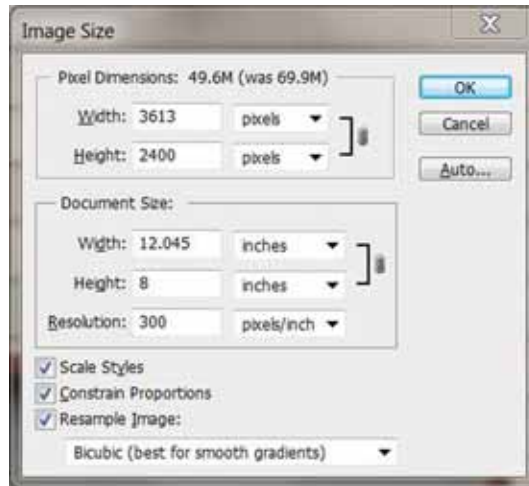
Whether designing in a dedicated sign making program like Gerber Omega, Signlab, or CasMate, or a commercial desktop publishing program like Photoshop, Illustrator, Corel Draw, or even a scan of a design, the goal is to get a bitmapped image ready to work with in a program like Adobe Photoshop. Vector-based programs will usually have bitmap export options. TIF and JPG work fine for this process since they work in Photoshop.

When possible, I design the final image in a program that supports "layers" or transparent backgrounds. That saves a step or two. If that is not possible, it will be necessary to knock out, or delete, the background in Photoshop. Either way, the goal is to end up with a sign layout or panel on a transparent layer so it can be placed and resized over the building or vehicle image as a layer in the later steps.

Photoshop is a bitmapped (raster) based program. Many design and layout programs are "vector" based, but most of them will export bitmapped file formats compatible with Photoshop.

While not absolutely necessary, it is a good idea to design the image with a background similar to the actual wall, building or vehicle. When the background is deleted in later steps, there will often be remnant "fringe" resulting from the anti-aliasing in the original image. For example, if the sign layout is designed on a white background, when the background is deleted, there will be various values of gray pixels along the edge. If placed on a dark brick or wood building, the gray pixels could show. If designed on a dark brown background few, if any, edges will be seen when composited over the background image.

There may be some scale issues to consider, too. In most cases, the final comp will only need to be printed on an image that's only 8-by-10-in. or so. The original vector file might have been designed for a 4-by-8-ft. sign, and



5. Digital cameras capture images at different sizes based on their mega pixel count. In most cases, the resolution will be much larger than you might need for a final image for a permit or for a portfolio photo. Resizing the image at this stage can save unnecessary file size. Under the *Image* pull down, select *Image Size* and make the necessary adjustments. For this project, I chose 8-in. tall and left it to resize proportionally at 300 dpi. This command will resize both layers at the same time. To keep track of the layers, I double-clicked on the default name in the layers tab to change the layer's name.

if exporting that size at 300 dpi, the file size could be huge. To save file size and be more efficient, scale a copy of the original layout down to 10-in. or so wide, then export it in or TIFF file format [go to *Image>Image Size*]. Normally, I work all of my photos and images at 300 dpi at the size I will be printing.

Remove the background If you're working on a layered design in Photoshop, with the background on a separate layer, you can just sit back, as quite a bit of the work is done. I'll explain how to move the active layers in the last steps of this article.

If the design is on a single layer with a solid background, it is necessary to remove the background. By default, Photoshop will not allow transparent pixels on the background layer, but changing to a normal layer is as easy as either renaming the layer to something else, or dragging the little lock icon to the trash can. Doing so will change the name to Layer 0.

Now, Click the *Magic Wand* tool in the toolbar and check the Tolerance settings at the top of the menu bar. Set it to around 32, then click on an area in the background. "Marching ants" should appear indicating selected areas. Hit the *Delete* key on the keyboard and the background should disappear. In those areas, a gray checkerboard pattern should appear—



6. At this stage, the project has a background layer with no reference points and another one with the markers aligned over it. Open the "design" image file again. With the background layer turned off, copy the contents of the layer with the design on a transparent background. In my case, I had two layers in my design image so I selected both layers, then used *Copy Merged* instead of just "Copy". After switching back to the image with the two background images, I pasted the contents from the clipboard using *Control-V*. The pasted image is typically pasted somewhere in the middle of the image, but will usually need to be resized and repositioned.

indicating transparent pixels.

If there are additional areas that need to be deleted, simply click on them again with the *Magic Wand* tool and delete them. (Alternatively, advanced users can create a layer mask to hide the background and also take advantage of the "refine mask" features in later versions of Photoshop.)

When finished, there should be only the sign layout on a transparent background. This is always a good place to save the current image as a new file name in either TIF or PSD formats. This finished file will be needed again in later steps.

Take photos in the field Just about everyone has some sort of digital camera now, so getting a digital image is fairly straightforward. Most people will probably shoot their photos in JPG format. Tripods are a great tool for a project like this, but not absolutely necessary.

This step takes a little planning and possibly a couple of extra ingredients, though. You will need references for size and location later in the process. Every job is different, but I'll throw out a few scenarios. A simple solution is to take a lightweight sheet of material the same size as the final sign and hold it up approximately where it will go. Corrugated plastic would work in most cases. Or, if you can get to the side of the building, you could



7. To help me with the resizing, I clicked in the Rulers on the left side (*View>Rulers* or *Control-R* if they are not visible) and dragged a vertical guideline to the edge of the left piece of tape. I repeated it for the right tape mark.



8. Since the sign design was on a transparent layer (after it was pasted in an earlier step), all I had to do was use the keyboard shortcut *Control-T* (*Command-T* on the Mac) to get the *Resize Image* tools. I clicked somewhere in the middle of the design and repositioned the image so one side was against a guideline. To maintain proportions, I held down the *Alt* key (*Option* key on the Mac) and dragged one of the opposite corner handles to resize it to touch the other guideline. To accept the resizing, I hit *Enter*.

locate markers with masking tape or duct tape, take the photos and remove them.

But it isn't absolutely necessary to place the reference points exactly where the sign will go—you just need some sort of size reference. For example, if the sign is going to be 4-by-8-ft. and will go on the second story, you only need to photograph something 8 feet long in front of the building. Later, you will be resizing your layout to the length of the reference points.

In most cases, take one shot for size reference, then remove the markers and photograph it again without moving the camera's distance from the subject. The tripod setup helps here. If you take the photos without a helper, use the tripod and the 10-second timer.

For a truck or vehicle, you can simply add a few reference marks using a Stabilo pencil. After the reference shots, wipe them off with a damp rag. Again, if you do a little planning, getting appropriate reference marks is easy.

Oh, yes—one minor point: For the final composition to be effective and convincing, consider the direction of light in both the field shots and the design. If the design file has bevels and shadows, plan the trip to the field so the light and shadows are similar. Conversely, if you shoot the field shots first, apply the bevels and shadows in the design image to match those of the field images.

Combine the location shots Photoshop typically offers a variety of different ways to get the same end. You may find your own work-

flow for these steps, but in the end, most will be fairly similar.

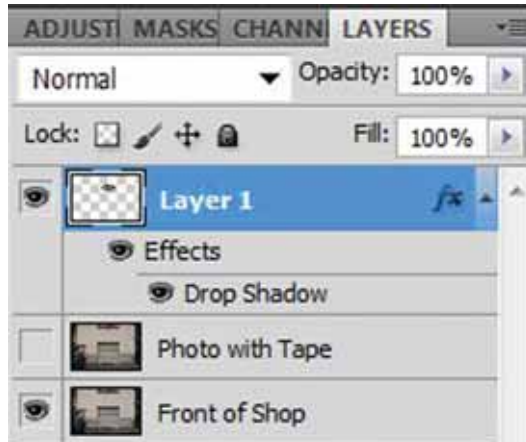
While it might be possible to combine all the parts in a single Photoshop layer, using its layering features can save a lot of time and give you much more control. Here I can only offer the basics of using the *Layers*, but learning them is essential to efficient use of the program.

For most projects, I'd suggest opening the unblemished background image from the location shoot. It will default with that layer titled *Background*. If the *Layers* window is not visible, click the *Window* pull-down menu and pick *Layers* or hit *F7* to toggle it on or off. To the left of the background layer, you will see an "eye" icon. The background layer should be highlighted to indicate it is active and the eye should be visible.

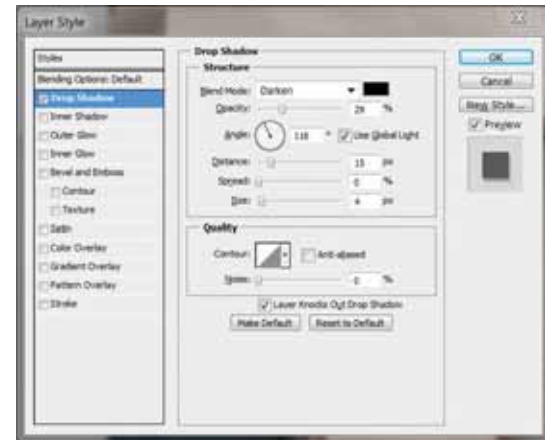
Open the second photo—the one with the tape marks or reference size elements—in a new document. Now, we must move this image into a layer above the background layer in the first file.

It is possible to click-and-drag the layer from one image to another, but here's how I do it. I hit *Control-A* in the reference image to select all of it (*Command-A* for Mac), the *Control-C* (*Command-C*) to copy that information to the clipboard. Normally, I close that file at that point.

Then go to the background image and hit *Control-A* to select all of it, and *Control-V* to paste the information into the document as a new layer. The new layer will be highlighted with the eye turned on. The underlying back-



9. To hide the layer with the tape markers and step ladder, I clicked the *Eye* icon on the layer. To get rid of the guidelines, there were two options. Either go to the *View* pull down and click the *Clear Guidelines* option, or click on *Show* and uncheck *Guides* (or use *Control-semicolon / Command-semicolon*)



10. While the design was still layered, I clicked the layer with the sign design to make sure it was the active layer then clicked the *FX* button at the bottom of the layers list. From that menu, I picked *Drop Shadow* and made a few adjustments to the shadow and clicked *Okay*.



11. Normally, I save the final file as layered PSD or TIF file in case I need to reposition or edit the image, then save a copy with a different name. Since it wouldn't need to be layered, I flatten the image by going to *Layers>Flatten Image* (or *F10*), and saved it. This particular image was optimized for an 8-in. tall print. It was saved originally at 8x12, so I'd need to crop it to 8x10 if I wanted to print it at the size.

ground layer will be gray. Click the eye icon to turn it off and see the background layer, then back on to see the tape, panels or reference marks layer.

If the two images were shot with a tripod, they should be very close in alignment. If not, one trick is to change the layer mode (at the top of the *Layers* tab) to *Difference* using the pull-down menu. Click *V*, or click the *Move* tool and use the keyboard's up/down, left/right arrow keys to nudge the top layer until the two layers match up as well as possible. Remember, this doesn't have to be dead-on. It is just a reference layer. Once you have it somewhat aligned, change the layer mode back to *Normal*.

Add the sign to the photo Now we can place the design created earlier, on top of the background image and reference image file. Open the design image file.

If you are an experienced Photoshop user, just drag the new layer from the current image to the background document. I typically use the same technique described earlier to get the second background image on top of the original background. Click *Control-A* to select all and *Control-C* to copy it to the clipboard. Change to the background document and press *Control-V* to paste it into a new layer.

Resize and position the design The last step in the process is to resize and relocate the sign design over the background layer(s). Click the image thumbnail in the *Layers* list. Once selected, click *Control-T* to activate the

resize tools on the selection. To constrain the properties of the design, hold down the Alt or (Option) key and drag a corner down so the sign design fits the area on the top Letters background layer. As a rule of thumb in a bitmap editing program, you can easily resize down and maintain image quality. If you resize larger, though, you will begin to lose quality.

Use the arrow nudge keys to reposition the layout as needed. When everything is resized and repositioned, hit the Enter key on the keyboard. Depending on the type of sign, you might also consider adding a shadow to the image based on the global light sources. I'd use the FX option at the bottom of the layers list and choose Drop Shadow. (See *Getting the most out of the Photoshop's FX Tools in Photoshop* in the May/June 2011 issue of *SignCraft*.) Once the design layer is set, click the eye icon on the layer that has the placement/reference marks to turn its visibility off.

Typically, I'd save the entire document as either a TIFF or a PSD at this point. Both are capable of maintaining the layers if needed in the future. Both formats will print to a standard printer while still layered. If desired, the entire document can be "flattened" by going to the Layers pull down and selecting *Flatten Image*, or use the keyboard shortcut F10. Give this flattened image a new file name and save it as a TIFF, JPG or PSD.

It's faster than it sounds For someone already familiar with most of Photoshop's basic commands, this process can go very quickly. For those readers, this entire article could be written with only a couple of paragraphs—mainly focusing on techniques to mark the size and location in the secondary background image. Some might even go an extra step and create gradient maps on some projects to make lettering appear to follow textures in the background, such as a corrugated panel.

But even without an extensive background in Photoshop, the steps outlined above should be easy to follow. Each project is different and may require a few minor steps and considerations. And remember, if you can sell a job without having to make a mock-up image, do it. Save the time and overhead! •§



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You can see more of Mike's photos at:

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