

# Printing Images at COSTCO Photo Centers

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Printing color prints with color consistency can be obtained by taking advantage of Color Profiles available from Dry Creek Photo. [www.drycreekphoto.com](http://www.drycreekphoto.com).

Dry Creek Photo is a website of Digital Imaging Resources for Photographers by Photographers. Their website is a wealth of information for photographers. They offer a database of freely available ICC printer profiles for digital labs worldwide. These include Fuji Frontier, Noritsu, Agfa D-Lab, LightJet, Durst, and Chromira printers among others.

You can use these profiles to get the best color fidelity from your digital prints. One can spend hours reading various articles and links on their website on various color management subjects and printing.

Before we start the process it is necessary to have a basic understanding of Color Management and why it is necessary to use color profiles when printing. Back in the days when we were shooting film we sent our color slides to a processor who works to a set of standards developed by Kodak or Fuji for the proper and consistent processing to ensure standard repeatable results. We were happy with the processing consistency from our favorite labs.

If we shot with black and white film we had our own processing standards. Perhaps we used Kodak Tri X film and processed it in D-76 for 8 minutes at 68 degrees and agitated every 45 seconds. That was our standard process and if we varied the process we got different results.

If you were a color printer it was necessary to make test prints to get accurate and true color to our liking. Those were the "Standards" that we used for consistent results.

Now that we're in the digital era we need to establish new standards. One classic example is with projected images at your photography club. The images must be saved with an sRGB color profile. Our Monitors, laptops and projectors must be calibrated to specific standards. Without calibration, there is no consistency. Some may say, "I calibrated my Monitor and "Tweaked" the settings to suit my taste." That is theoretically a bad practice. An example I like to use is taking your family vehicle in for a tune-up and when you get home you tweak the settings. The family vehicle is a finely computer tuned device. By changing one setting you can upset the balance and get undesired results. So, why upset the calibration standards? As Mr. Newton said in his third law of physics, "For every action, there is a reaction."

## What are color profiles?

Profiles are simply look-up tables that describe the properties of a color space. They define the most saturated colors available in a color space; i.e. the bluest blue or deepest black your printer can produce. If you don't have a profile, the trio of Red, Green, and Blue values (or CMYK) that make up a color have no particular meaning — you can say something is blue, but not exactly which shade of blue. Accurate profiles are the key to a color-managed workflow. With accurate monitor and printer profiles, your prints will closely match what you see on your monitor. Without profiles, you need to rely on trial and error combined with good old-fashioned guessing.

## What is ICC?

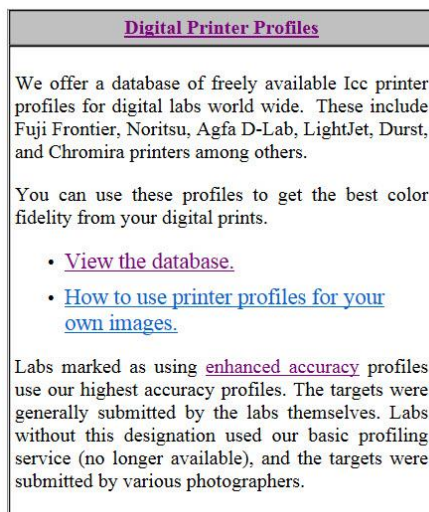
ICC, (<http://www.color.org/index.xalter>) The International Color Consortium was established in 1993 by eight industry vendors for the purpose of creating, promoting and encouraging the standardization and evolution of an open, vendor-neutral, cross-platform color management system architecture and components. The outcome of this co-operation was the development of the ICC profile specification.

The intent of the International Color Consortium (R) profile format is to provide a cross-platform device profile format. Device profiles can be used to translate color data created on one device into another device's native color space. The acceptance of this format by operating system vendors allows end users to transparently move profiles and images with embedded profiles between different operating systems. This permits tremendous flexibility to both users and vendors. For example, it allows users to be sure that their image will retain its color fidelity when moved between systems and applications. Furthermore, it allows a printer manufacturer to create a single profile for multiple operating systems.

And you thought digital photography was easy. Each of us sees color differently. The next time you go into an appliance store where they have televisions sets on display you will see varied images on each TV. Visually, they all look good. But, using your iPhone, snap a picture of a few of them and see the difference a camera sees. They will vary.

Personally, I photograph every image in the RAW image file format. My reason for this is simple with this one question. When you shot with film, did you camera process your images? When you photograph JPEG images, your camera is making all of the decisions relating to white balance, contrast, compression of file, saturation and etc.

Having established why we have these standards and their purpose and why we need to use them let's get back to our Color Profiles.



**Digital Printer Profiles**

We offer a database of freely available Icc printer profiles for digital labs world wide. These include Fuji Frontier, Noritsu, Agfa D-Lab, LightJet, Durst, and Chromira printers among others.

You can use these profiles to get the best color fidelity from your digital prints.

- [View the database.](#)
- [How to use printer profiles for your own images.](#)

Labs marked as using [enhanced accuracy](#) profiles use our highest accuracy profiles. The targets were generally submitted by the labs themselves. Labs without this designation used our basic profiling service (no longer available), and the targets were submitted by various photographers.

**Figure 1**

The first thing we need to do is go to the Dry Creek Photo website and locate the Digital Printer Profiles. (See Figure 1.) These are presently located in the lower left corner of their home page. Click on View the Database. The majority of the profiles are for Fuji Frontier and Noritsu digital printers. On that page you will find additional information relating to color profiles and color management. Select your state and locate the city where your neighborhood COSTCO is located. You may see a special note concerning the labs use of multiple printers. Select the profiles for the printers. In my case, they have a **Noritsu 34-Pro** printer using Fuji Crystal Archive Paper. They also have an Epson 7800 color printer. I will download all profiles to a separate folder on my Desktop or in My Downloads file.

## Color Profile Workflow:

1. When you have located the profile file, Right Click on the file. The Window will open and the top line will say, "Install Profile." Left click and it will be installed.

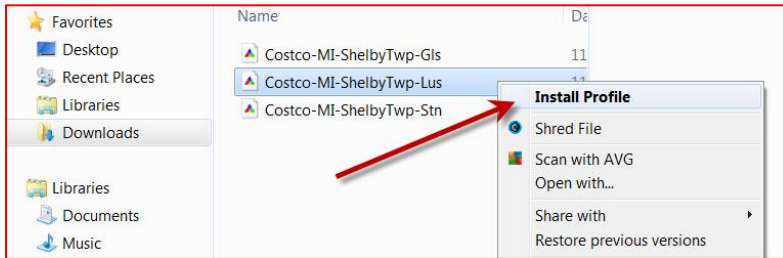


Figure 2

2. When preparing an image to be printed I suggest creating a duplicate file, working on the duplicate and closing the original file. It's a little safeguard in case the original is ruined or damaged. A good practice that I do regularly.
3. When your image is open in Photoshop, determine your print size using either the Crop Tool setting Width x Height and 300 pixels/inch resolution.

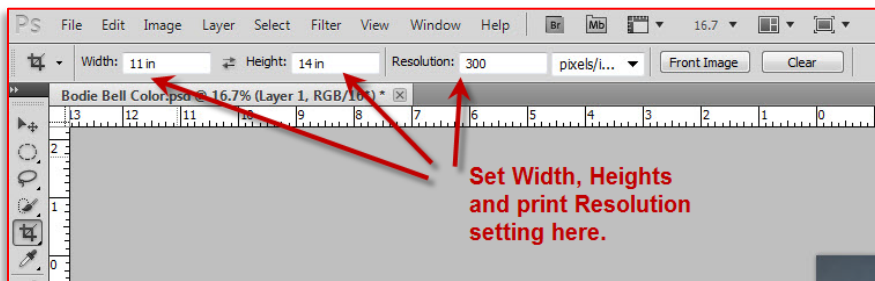


Figure 3

Figure 4

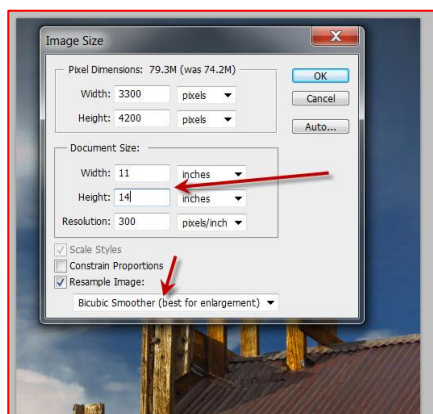


Figure 4

4. Or, use Image>Image Size (See Fig 4.)

Set your desired print size and set the Resolution to 300 pixels/inch.

5. Once you have made all of necessary adjustments and you're satisfied with your image, we will Assign a Color Profile.

6. Click on Edit>Assign Profile and click okay. (See Figure 5.)

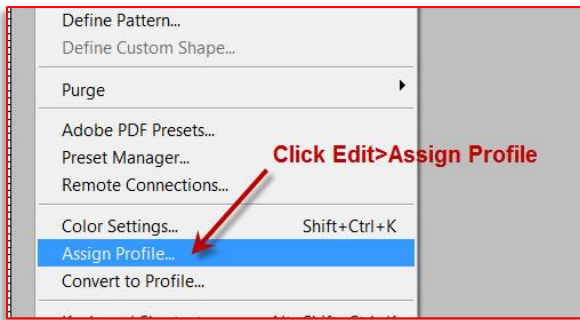
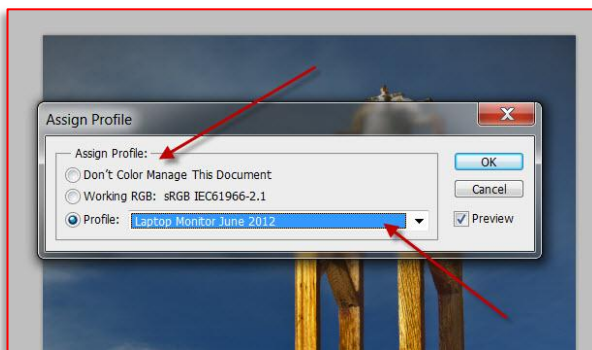


Figure 5



7. Assign Profile Window will appear. Click on Profile and scroll down to desired COSTCO Profile. Click okay. (Figure 6 & 7.)

Figure 6

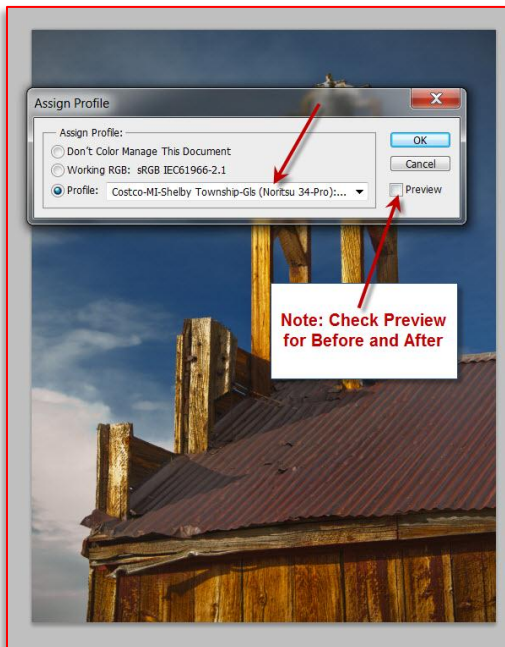


Figure 7

8. You may want to save the file as a jpeg with a specific name to identify it as a profiled image. Example: Bodie Bell-Costco Pro.
9. Your Print file may be emailed or saved to a thumb drive for printing.
10. You may want to create two 8 x 10 test images. One print without a color profile and one with an Assigned color profile. Also you could add text to the prints indicating profile on and off.
11. Remember when ordering prints on-line, DO NOT check Auto-Correct. You can also turn off Auto-Correct under Print preferences.

I have been using the COSTCO printing service for almost two years and have not experienced any problems.

## Printing with Lightroom

Preparing images for printing via Lightroom is somewhat similar to Photoshop, but easier. I had the opportunity to attend a Lightroom seminar presented by NAPP (The National Association of Photoshop Professionals) and Scott Kelby. Scott said, "Once you have printed in Lightroom, you will never go back to Photoshop." He's right! I have more control over the printing process and quicker in Lightroom.

### Lightroom Printing Workflow:

- Once you have installed your new COSTCO color profiles they will be available in Lightroom too.
- We have made all of our adjustments to our selected image in Lightroom and we're ready to move to the Print Module.
- You have established how your image will be printed (print size, horizontal or landscape, sharpening and etc.) and you ready to print.
  - Go to Color Management and select Profile.
  - Click on selected profile (see the up and down arrows next to selected profile)  
See Figure 1 and 2, below

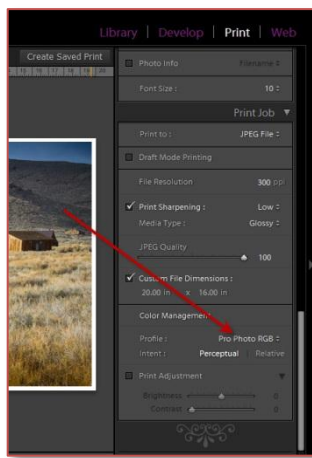


Figure 1

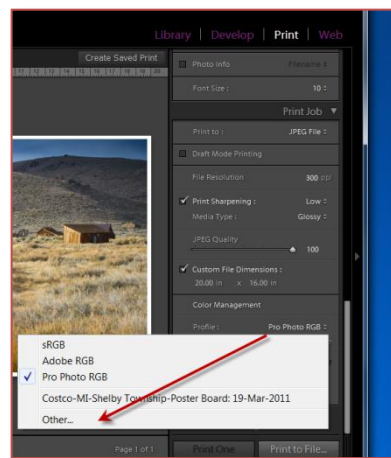


Figure 2

- If your profile is not shown, click on Other to bring up a new window showing installed profiles. Note, you may see other installed color profiles that were installed by your color printer. See Figure 3 below

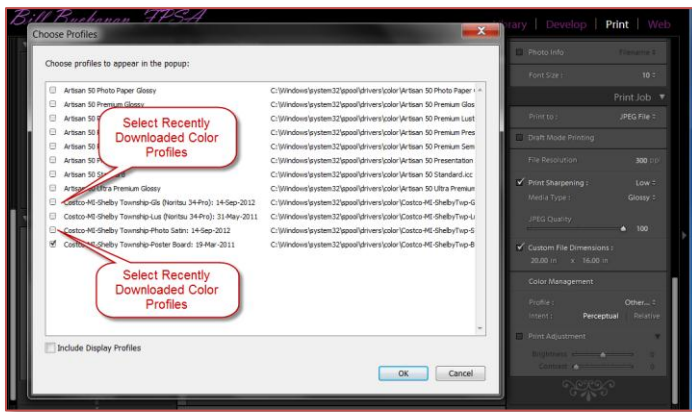


Figure 3

- Select your new color profiles and click in box to select. Click OK
- Your selected color profile is now installed and will be included with the file information for the desired print. See Figure 4 below.

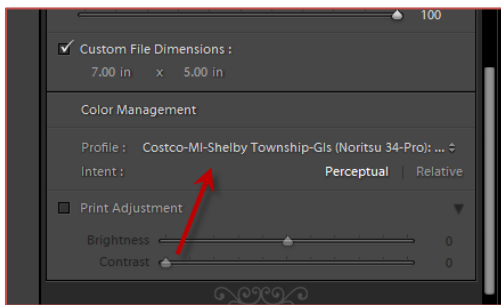


Figure 4

- Now that you have selected the desired color profile you can now click on “Print to File” and you will open a “Save As” window. Indicate where your file will be saved with its proper file name and click OK. Lightroom will save your JPEG file properly sized for the desired print.
- Finally, you may now send your JPEG file to COSTCO for printing. Remember to select Glossy or Luster when selecting you prints. 16 x 20 prints made on the Epson 7800 printer are available in Luster only. Also, be sure you turn off AUTO CORRECT.
- COSTCO will send auto responses upon receipt of your order and they will also advise when prints will be ready for pick-up.