

Preparing Image files for Printing at the Lab like Costco Photo Centre

Written and tested by: Juraj Dolanjski, copyright © 2017

Note:

If you are planning to do any adjustments to the file (colour, contrast, brightness), your computer (monitor) MUST be colour calibrated. If it is NOT, you cannot make any judgement of the parameters above. Your printing results will be unpredictable.

If your system is not colour calibrated, you can still print (but do not adjust colours in the computer), as long as what came from the camera can be trusted and as long as you had correctly set white balance in camera BEFORE shooting.

Why Print?

- Feeling of satisfaction, seeing your printed work
- To get the highest resolution from the camera
- To exhibit
- To give a gift
- To donate
- To preserve the file content for the future

Printing Steps

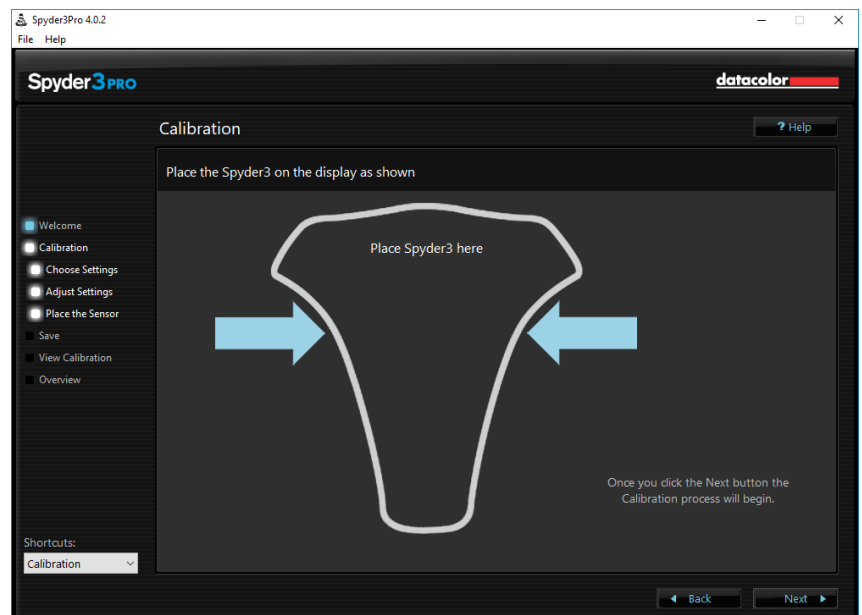
- Calibration
- Setup Photoshop
- Edit your image file
- Download printer profile
- Install printer profile
- Perform soft proofing
- Size the image file
- Upload to the Lab

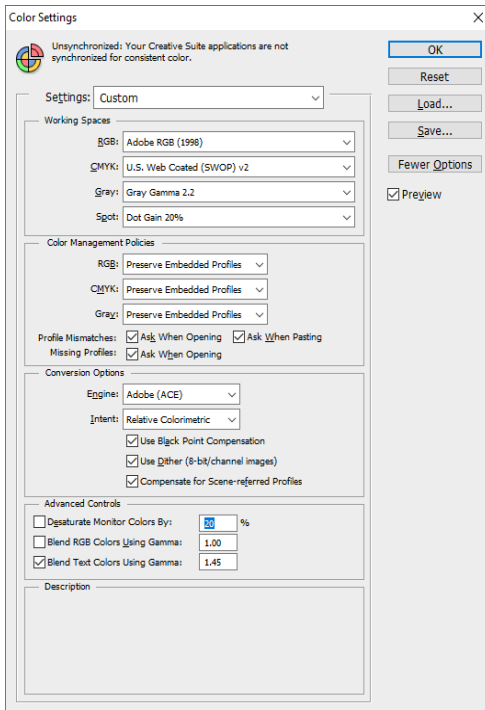
Calibration

- You need hardware and software, like Spyder
- Perform calibration every 3 months

Setup Photoshop

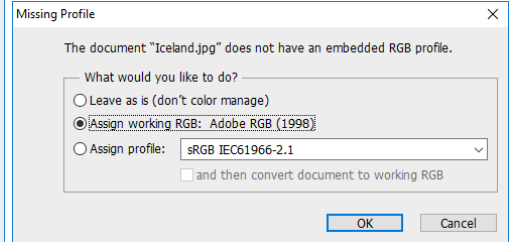
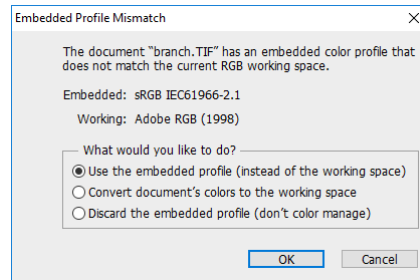
- Open PS, select Edit, Colour settings
- Check that all settings are as per next screen





Assign profile to your image

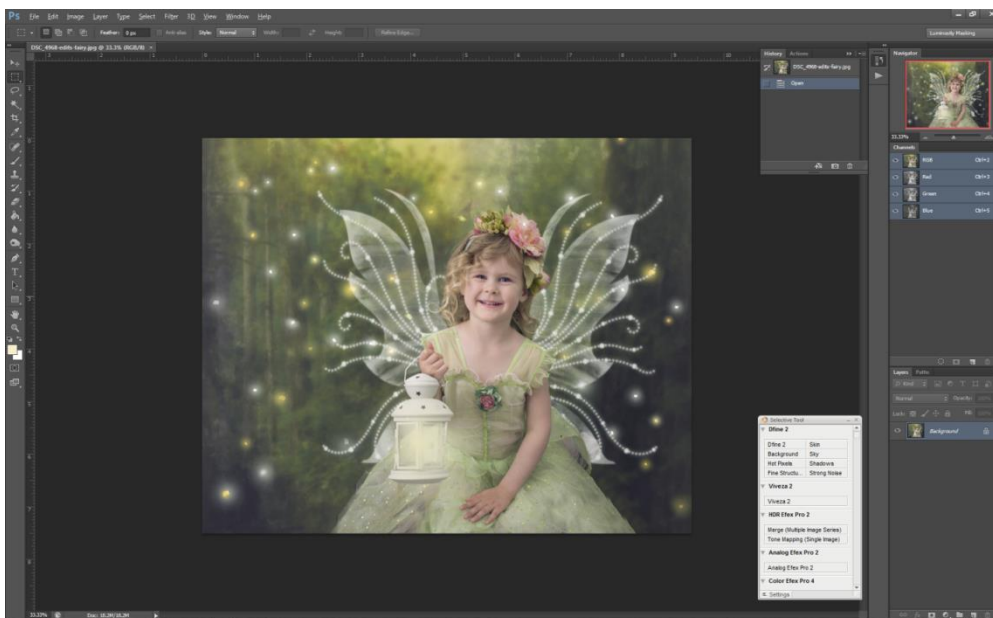
- If your camera allows, set it for Adobe RGB profile
- This is a wider gamut of colours that is more suitable for printing
- Open the image you will print
- If you see this message:



- If image colour balance and contrast do not look right
- Select Edit, Assign Profile and select sRGB

Edit your image file

- Open up image file in Photoshop or similar app
- Do all the editing and adjustments that you wish



- Save that file with filename-edited
- This is now the Master file that is used for printing

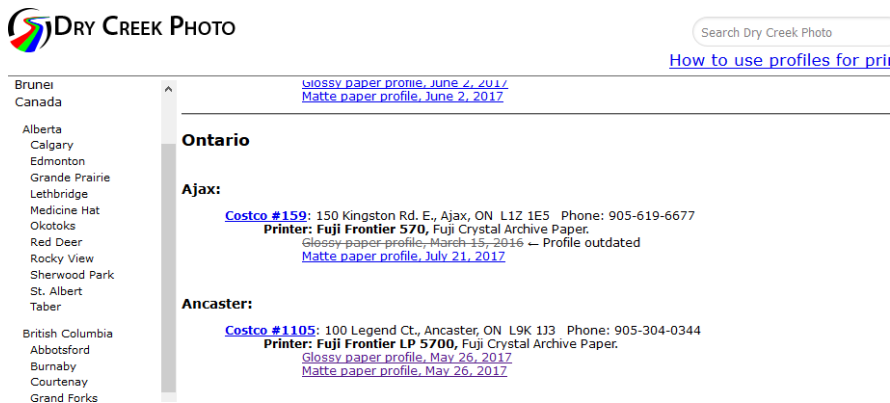
Before you start

- Must know the printer model and the paper that will be used, for either self printing or lab printed
- You have to acquire the profiles for that combination
- A profile is a file that determines how colours are to be printed for specific printer-paper combination

Download Printer Profiles and install them for Windows

Before preparing file for printing, download a printer profile, for the lab that will do the printing (in this example Costco in Ancaster). Currently there are 2 profiles: Glossy and Matte. This is for all print sizes up to 12X18". Larger poster printing profile is not published (for now, but check my solution).

https://www.drycreekphoto.com/icc/Profiles/Canada_profiles.htm#CA

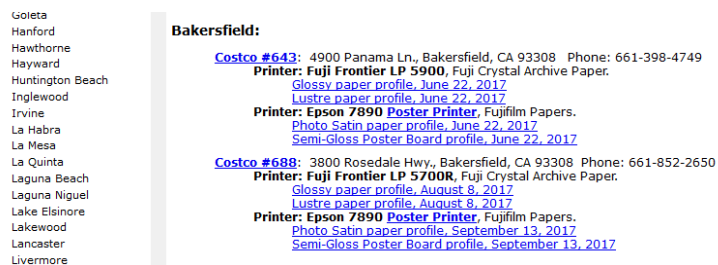


Save those 2 files on your computer.

For poster (16x20 and 24x36") printing
Costco uses Epson 7890 printer + Fuji Satin paper
Costco Canada does not publish profiles for this

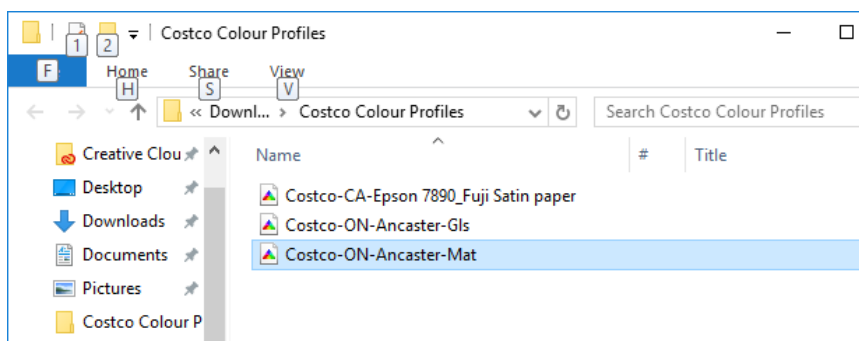
Since this California location uses the same printer and the same paper, download their profile.

https://www.drycreekphoto.com/icc/Profiles/California_profiles.htm#CA



Install printer profile for Windows

- Those profiles must be installed (this only needs to be done once).
- Go to the folder where you saved profile files
- Right click on each and click on Install



Select one at a time and right click on Install.

Installing printer profiles for Mac

Mac OS X:

Storing profiles in /Library/ColorSync/Profiles allows all users to use them. An alternative area, for users without Admin privileges, is /Users/<username>/Library/ColorSync/Profiles. Profiles stored here are available only to the current

user. The ColorSync Utility gives access to the details of individual profiles, shows gamut plots, can rename profiles and validates profile structure, among other useful tasks.

OSX 10.7.3 (Lion) and above: The system profile folder is hidden by default. Storing profiles in this folder is possible, but requires following the steps https://www.drycreekphoto.com/icc/mac_osx_sys_profile_folder.html

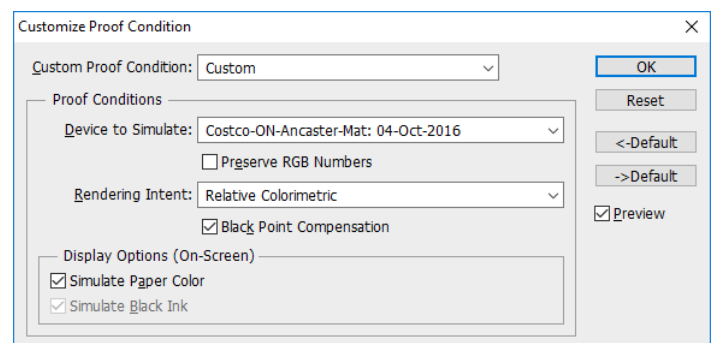
OSX 10.9 (Mavericks) and above: Depending on the printer profile, individual system configuration, and perhaps the phase of the moon, Adobe products (e.g. Photoshop, Lightroom - and particularly the Creative Cloud or CS6 versions) sometimes refuse to recognize profiles installed outside an Adobe-specific location. If a printer profile installed to either the system or per-user folder does not show up from within an Adobe product, move the profile to /Library/Application Support/Adobe/Color/Profiles/Recommended. A reboot may be required for the profile to be visible from within the Adobe application.

Perform soft proofing

- Soft proofing simulates what the printed file would look like, saving on the printer costs
- Launch PS, open original image file
- Make a copy of it
- Go to Image, Duplicate
- Go to Window, Arrange and select 2 up Vertical



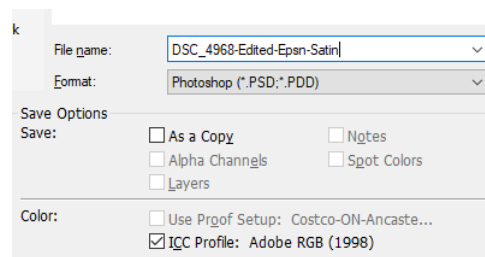
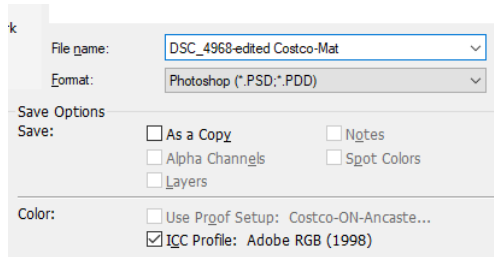
- Original is on the right, copy on the left
- Click on View, Proof Setup and Custom
- Select profile for the paper that you plan on using



- The proof copy on the left became duller
- Go to View, Gamut warning to see if some colours can't be printed at all
- You can now use any adjustments to tweak the proof copy to look like the original (S curve + 10% bright)

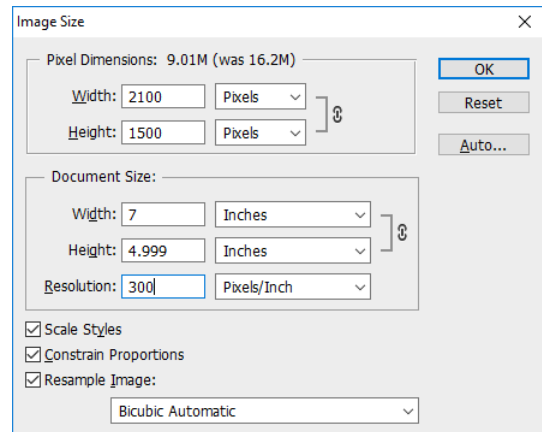
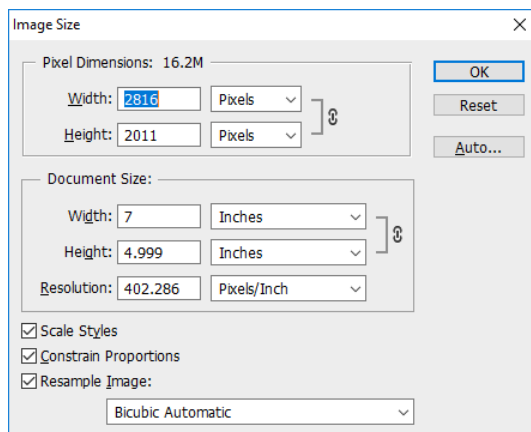
Save the print file

- Typically this file is flat, no layers
- Save it with a meaningful name, Costco_10X8_Mat...
- No Jpeg (in case you wish to continue editing down the road)



Size the image file

- Most of the time image must be resized to match printout size
- The file needs to be re-sized, so that the printer does not crop it arbitrarily
- Load previously saved edited file
- Let's say we wanted to print 7 x 5 inch
- Click on Cropping tool and in Customisation area enter 7 in and 5 in respectively
- Crop area can be moved, resized and rotated
- Hit Enter
- Check file resolution

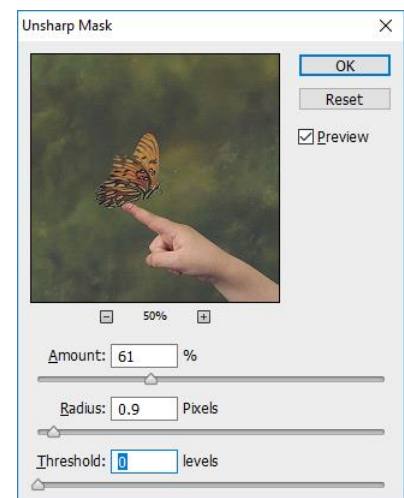


Standard print sizes (Aspect Ratio)

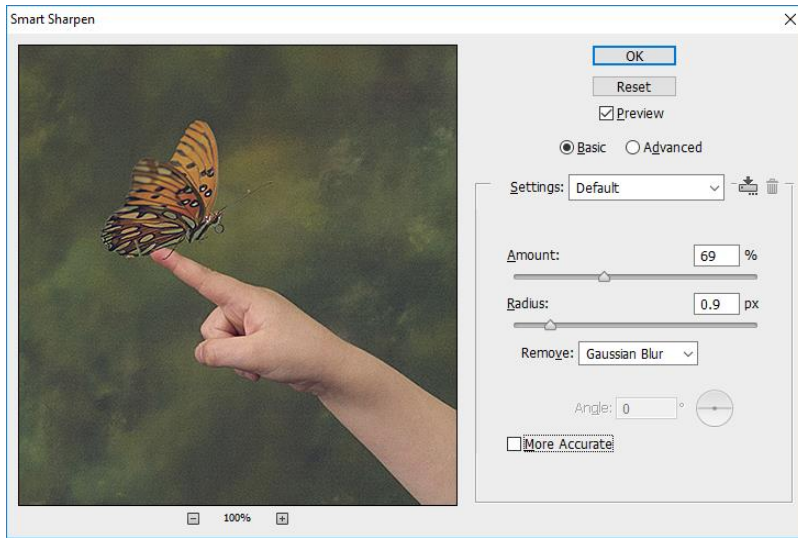
- 4 X 6 (1.5)
- 5 X 7 (1.4)
- 8 X 10 (1.25)
- 11 X 14 (1.27)
- 16 X 20 (1.25)
- 20 X 24 (1.2)

Sharpen/save print file

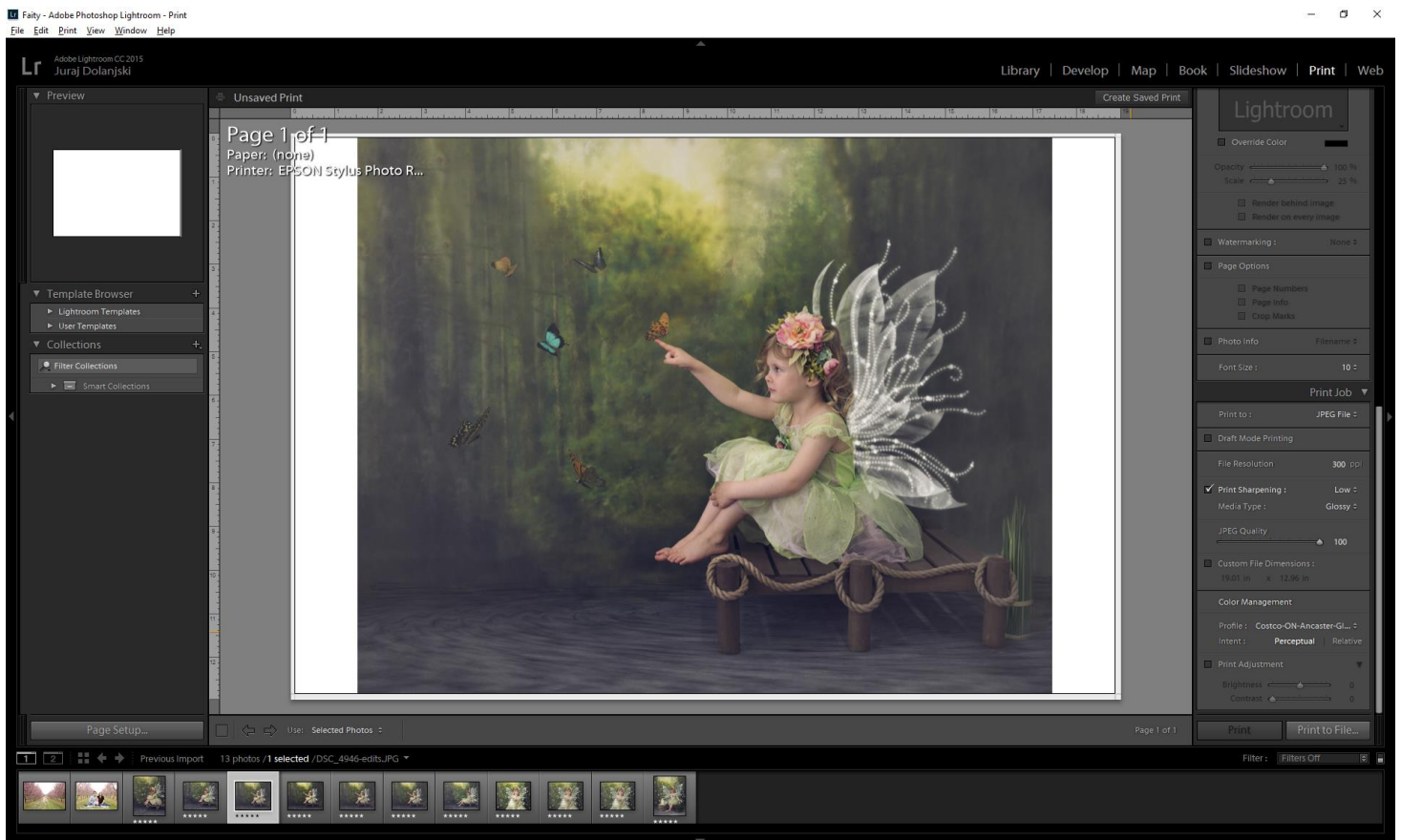
- Print file must be sharpened
- Matte paper = more sharpening



- Glossy paper = less sharpening

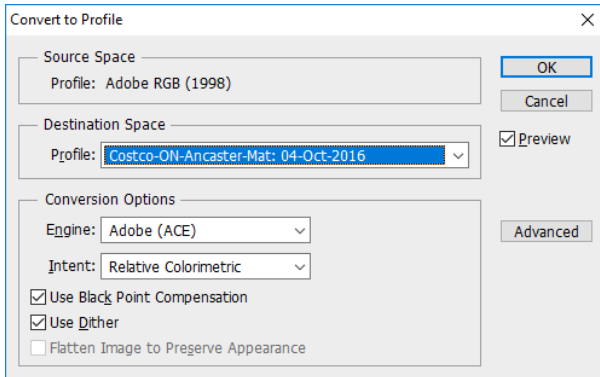


If you use the Lightroom for printing, it is more intelligent than Photoshop. It will automatically sharpen your image, depending on what you use it for.



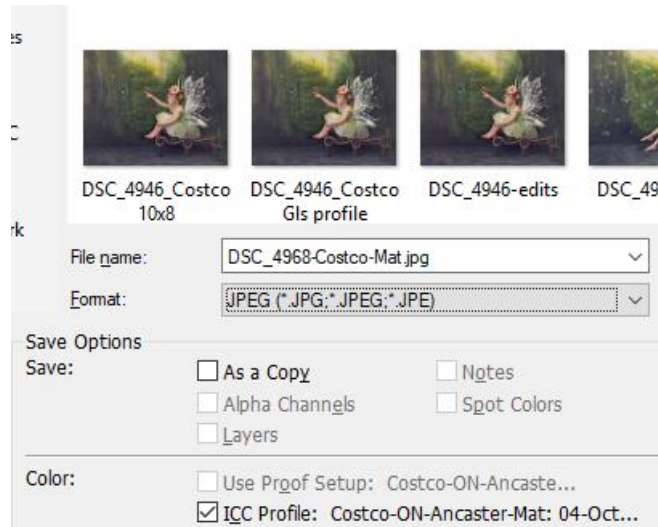
Extra step for Lab printing

- An important extra step must be performed
- Click on Edit, Convert to Profile
- Destination space must match the printer-paper combination
- OK



Saving for Lab printing

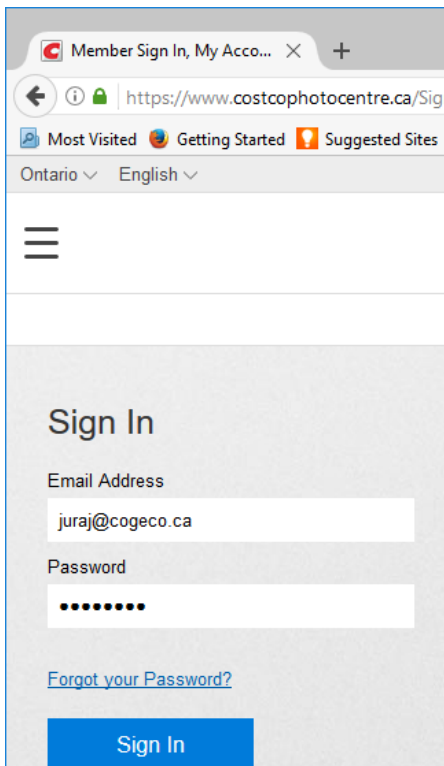
- Save a file as Jpeg, quality 10-12
- Use meaningful name
- Note the ICC Profile name: Costco.....



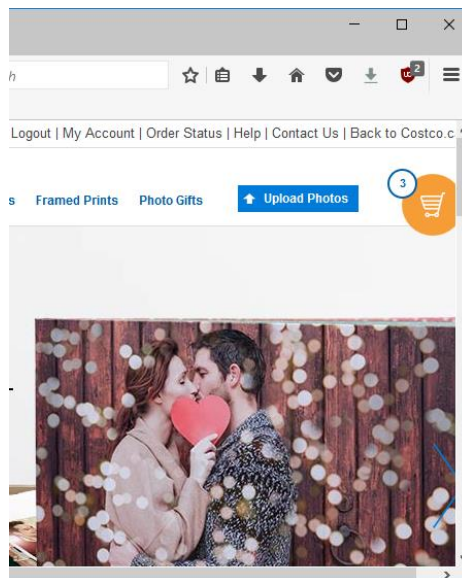
Uploading images to Costco Lab

<https://www.costcophotocentre.ca/Home>

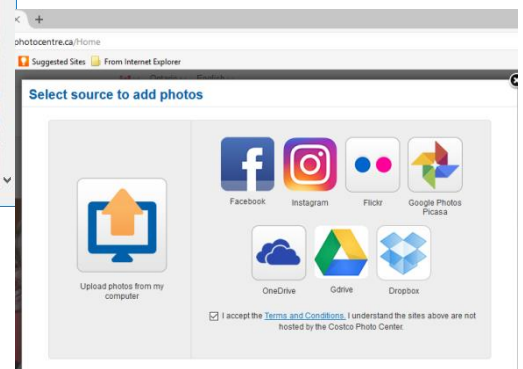
Sign in



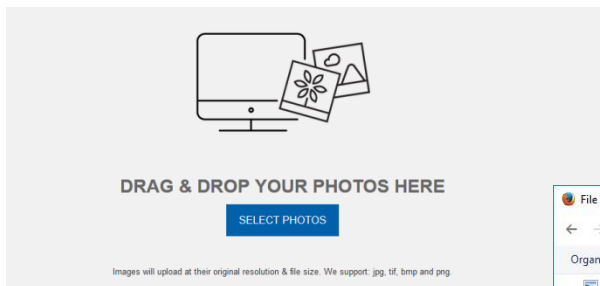
Click on Upload Photos



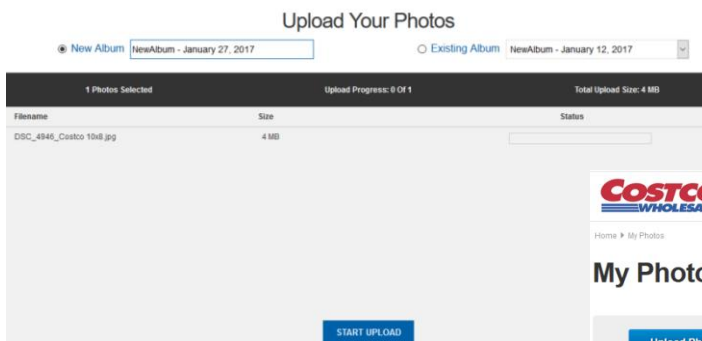
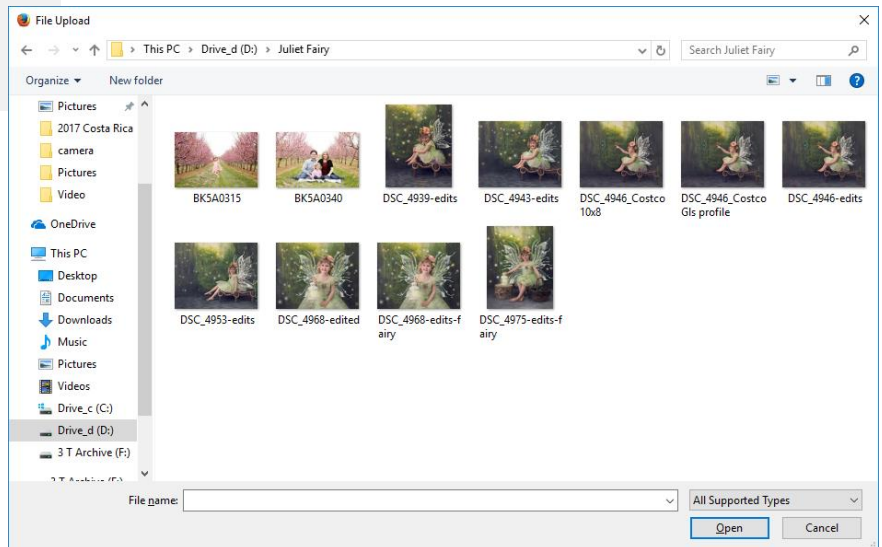
Select Computer as a Source



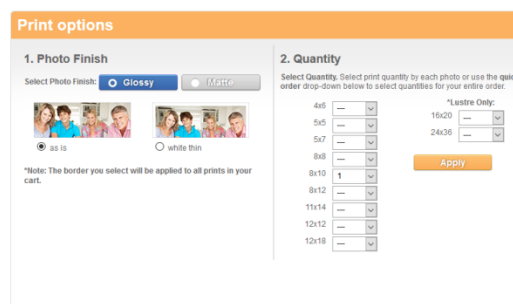
Click on Select Photos



Navigate to the folder where prepared images were stored and select them

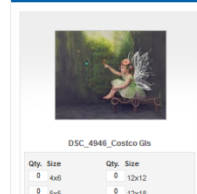


Click on Start Upload
Select Prints

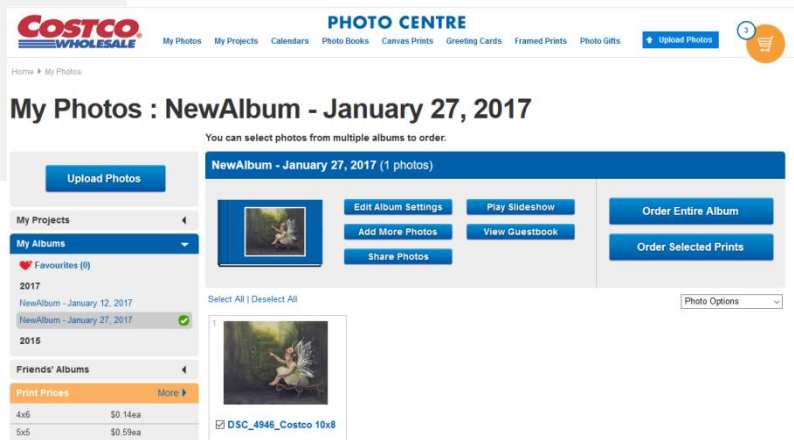


Print Prices & Options				
4x6	\$0.14 ea	8x8	\$2.49 ea	11x14 \$5.99 ea
5x5	\$0.59 ea	8x10	\$2.49 ea	12x12 \$6.49 ea
5x7	\$0.59 ea	8x12	\$2.49 ea	12x18 \$6.49 ea
				24x36 \$19.99 ea

Prints

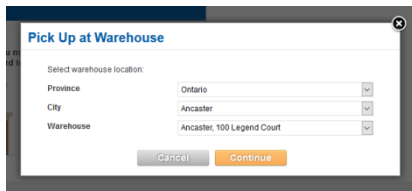


Click on Order Selected Prints



Make sure that your selection matches the finish: Glossy or Matte and the size that you specified during creation of print profiled file. Selecting wrong finish will result in colour miss-match!

Click on Continue



Select to pick up at the Warehouse

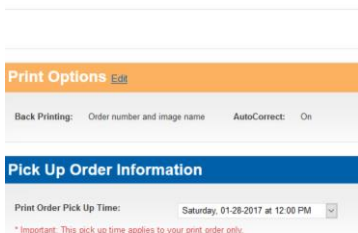
Review your order! You will notice that by default AutoCorrect is turned On. You must turn that off or your colours will be miss-matched!



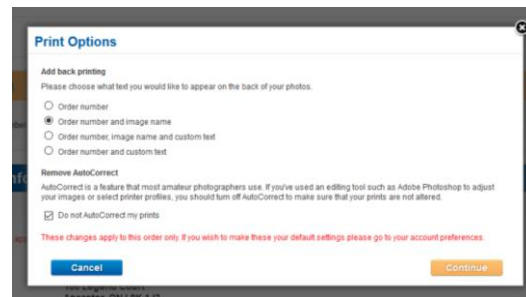
Click on Edit (by Print Options)

Review & Place Order

Please review your order for accuracy before clicking the 'place order' button. Change



Continue



Click on Place my Order

If you are ordering at a Kiosk at the store

Bring your Jpeg files in and do NOT forget to turn OFF autoCorrection (in one of the final selection screens)!