

Technical Newsletter:

Working with Other Commercially-Available Papers
HP Designjet Z3200 Photo Printer series



The large-format HP Designjet Z3200 Photo Printer series is designed to deliver outstanding image quality, from indoor retail signage to fine art photos and prints to line drawings, across a wide variety of Original HP printing material and other commercially-available paper. To ensure optimal results, Original HP large-format printing material is uniquely engineered and tested together with HP Vivera pigment inks and the printer. Scientific innovation goes into the development of Original HP printing material. For example, HP devotes around two years developing a new photo paper, which can require four to ten revisions using up to 15 ingredients per formulation.

This careful engineering and testing of the entire system of HP printing material, HP Vivera pigment inks, and the printer enables HP to deliver an unmatched combination of outstanding photo-image quality, water resistance, and exceptional fade resistance. Prints produced on a range of HP paper resist fading for over 1 year without lamination and over 3 years laminated when displayed in or near a window. In interior display conditions away from direct sunlight, prints resist fading for over 200 years¹. For more information on Original HP printing material designed together with the HP Designjet Z3200 Photo Printer series, visit www.hp.com/go/designjet/supplies and www.hp.com/go/supplies/printpermanence.

For flexibility and versatility, customers can choose from over 50 Original HP printing materials, or other commercially-available paper.

This document provides a quick reference guide to help users manage and work with other commercially-available paper for the HP Designjet Z3200 Photo Printers series.

¹ Display permanence rating for interior displays/away from direct sunlight by HP Image Permanence Lab, and by Wilhelm Imaging Research, Inc. on a range of HP paper. Water resistance and interior in-window display ratings by HP Image Permanence Lab on a range of HP paper. For details: www.hp.com/go/supplies/printpermanence.

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Introduction

Using other commercially-available papers correctly with the HP Designjet Z3200 Photo Printer series

The large-format HP Designjet Z3200 Photo Printer series is designed to deliver outstanding image quality across a wide variety of other commercially-available paper. Since there is a wide choice of brands and paper, it is very important that the customer selects the correct paper type setting while loading the paper and printing from the driver. This paper type setting determines a number of basic parameters for the printer-paper interaction. Among others, it includes: ink limiting, maximum density, color transition linearity thresholds, and an ICC profile. Paper handling is also tuned to each type of paper: paper advance, number of passes, bidirectional, etc...

In order to achieve a good image quality result with certain papers coming from different media vendors, HP customized an important list of papers for the HP Designjet Z3200 Photo Printer series. For each of them, all the settings mentioned above, along with the ICC profile, have been characterized and recorded in a single file called a "paper preset" (.oms file) that can be then uploaded to your HP Z3200 printer in order to easily use any of the customized papers.

This newsletter covers the directions on how to use and install existing paper presets as well as the detailed steps required to create new paper presets with an automatic or advanced process. At the end of this document, you can find Appendix A with information on Print Material Characteristics and Appendix B with FAQs (Frequently Asked Questions).

"The information contained herein is a guide to help you select the best possible settings when using other commercially-available branded paper with the hp printers, firmware versions and hp drivers specified. However, HP does not make any express guarantees for the results obtained under such proposed settings."

How to use existing paper presets

If you want to print with your HP Designjet Z3200 Photo Printer using any other commercially-available paper, you have to follow these few steps:

Download and install a paper preset

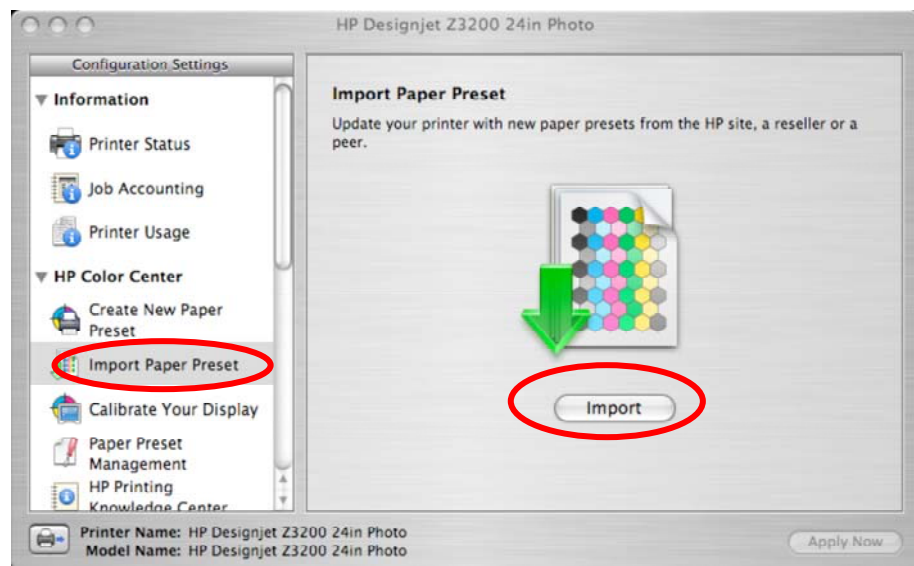
You can find paper presets (.oms file) for a number of other commercially-available papers on the following web pages:

- www.hp.com/go/Z3200/paperpresets
- media vendor web page

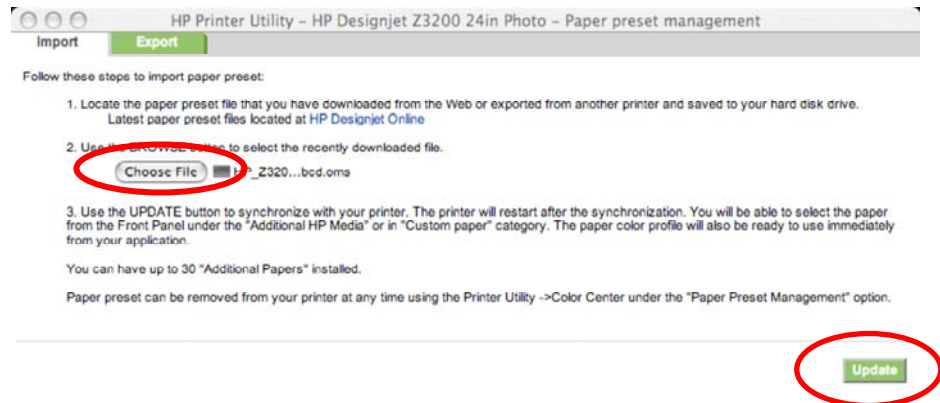
Once you have located the paper preset corresponding to your paper, please download it to your computer. The paper-preset may be bundled with other paper-presets of the same category or same media vendor. If the downloaded file is compressed, you must first uncompress the package, and locate the ".oms" file bearing the name of the printing material you wish to use. Once the paper preset (.oms file) is in your computer, you will be able to install it in a few simple steps:

Steps for Macintosh users:

1. Open the HP Printer Utility application
2. Select the option Import Paper Preset inside the HP Color Center, click on Import.



3. The HP Z3200 Web Server will open. Click on Choose File to select the paper preset (.oms file) that was previously downloaded (either from HP Web or from other media vendor Web site)

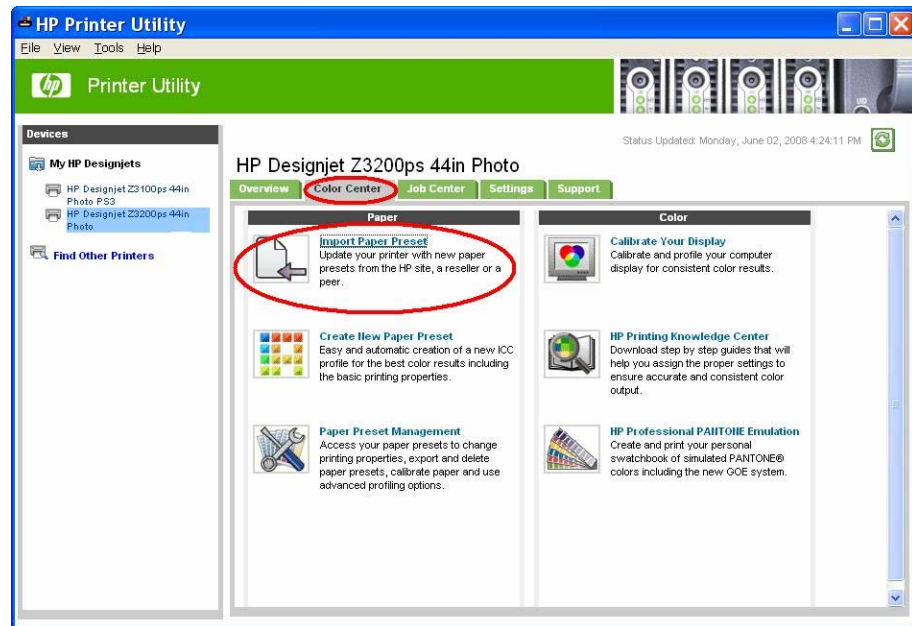


4. Click on the Update button and wait for the update process to finish. It may take some time. The printer will automatically restart when the update is complete; wait until it has restarted and the front panel indicates that it is ready.
5. HP Printer Monitor will automatically display a pop-up window to update the paper list on your computer, click on Solve.
6. The new paper type will appear in the Additional paper or Custom paper category in your printer's front panel. Also, the ICC profile will be automatically installed in your computer and ready to use by your imaging software.

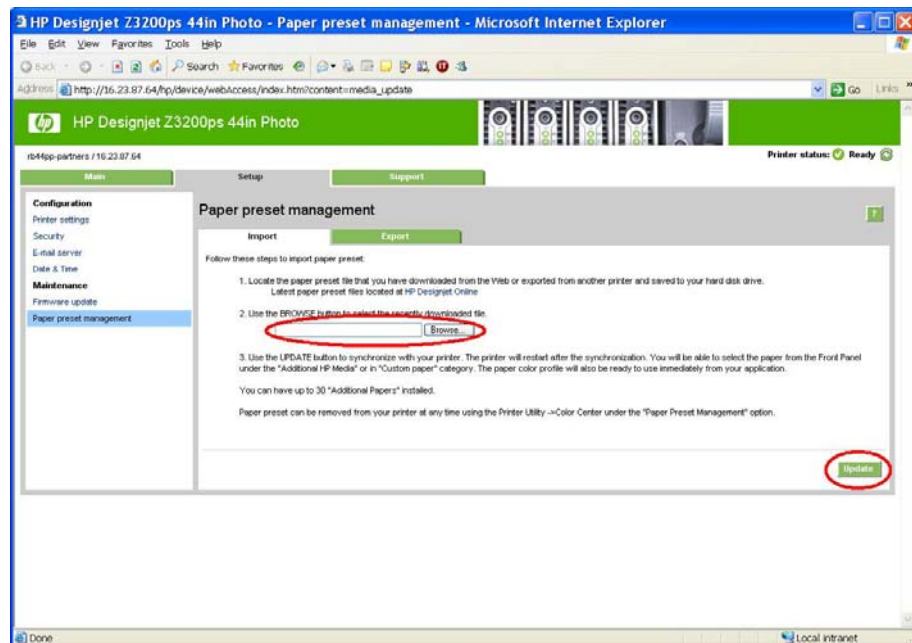
NOTE: Remember that if you had your imaging software application already open when you installed the paper preset, you might need to restart the application so that the new ICC Profile appears.

Steps for Windows users:

7. Once the paper preset file is copied to the computer, open the HP Printer Utility software
8. Select the HP Color Center tab and click on Import Paper Preset



9. The HP Z3200 Web server will open. Click on Browse to select the paper preset (.oms file) downloaded previously, then click on Update



10. Wait for the update process to finish. It may take some time. The printer will automatically restart when the update is complete; wait until it has restarted and the front panel indicates that it is ready.
11. HP Printer Monitor will automatically display a pop-up window to update the paper list on your computer, click on Solve.

- The new paper will appear in the Additional paper or Custom paper category in your printer's front panel. Also, the ICC profile will be automatically installed in your computer and ready to be used by your imaging software.

NOTE: Remember that if you had your imaging software application already open when you installed the paper preset, you might need to restart the application so that the new ICC Profile appears.

Use the paper preset

Now that you have completed the procedure, load the paper in the printer, select the new paper from the printer front panel: **Main Menu > Paper Types List > Additional Papers** category and run the calibration if the option is available. To do this, just select **Main Menu > Image Quality Maintenance > Calibrate color** from the printer front panel.

How to create a custom paper preset

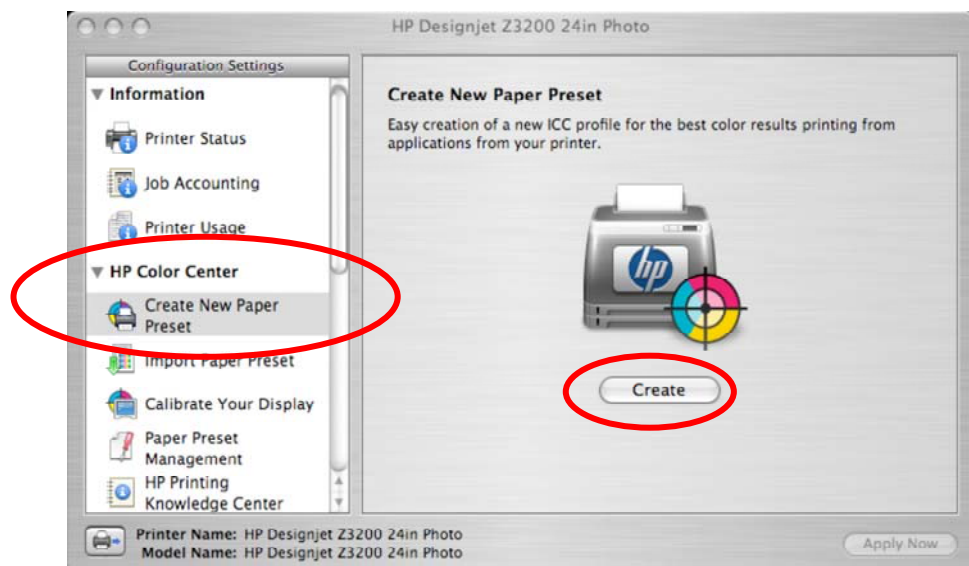
In the case the paper preset doesn't exist, you can easily create your own paper preset following the **Basic Paper Preset Creation** steps. If you want to further fine-tune color and printing characteristics, please refer to the **Advanced Paper Preset Creation** procedure.


Basic paper preset creation

To create a paper preset, you can follow this simple procedure

Steps for Macintosh users:

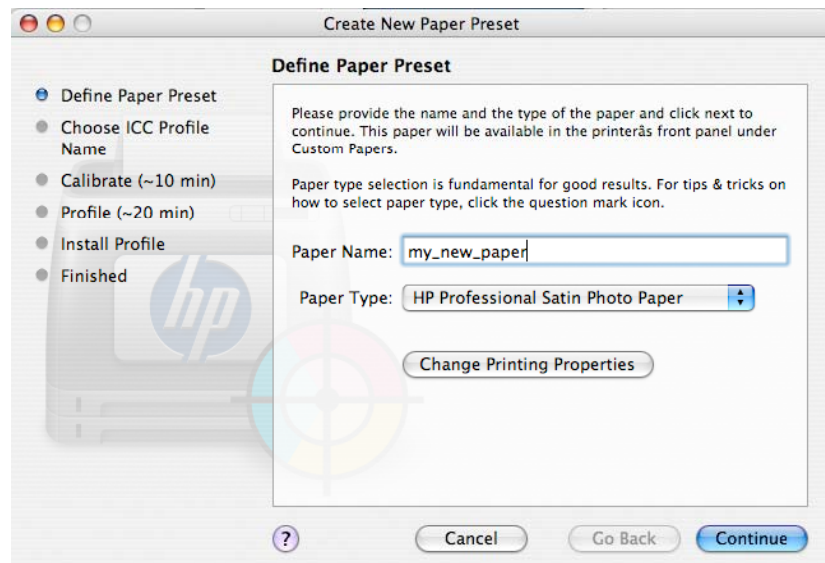
- Open the HP Printer Utility application
- Select the option Create New Paper Preset inside the HP Color Center, and then click on the Create button.



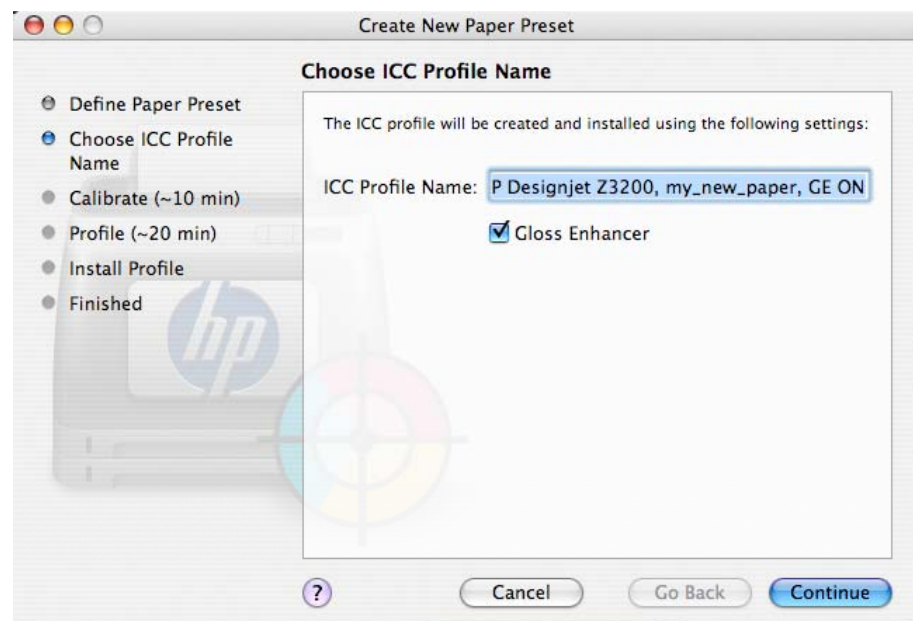
- Enter your paper's name and select a paper type from the drop-down menu. The paper type determines the amount of ink used and other basic printing parameters. For more information, see the online help in the HP Color Center:  button.

A detailed description of each paper type is available in Appendix A, Print Material Characteristics.

4. Optionally, click on Change Printing Properties to fine-tune some basic settings like the cutter or paper thickness. Please see more details in the Advanced Paper Preset Creation section.



5. Click **Continue**.
6. Now go to your printer and load your paper. Once this is done, the printer front panel will ask you to select a paper name. You will find the new paper name (as you defined it in step 3 of this procedure) in the printer front panel, inside the **Main Menu > Paper Types List > Custom Papers** category. Go back to your computer.
7. Choose a name for the ICC profile. This is the name you will use later to select the profile in your imaging software.

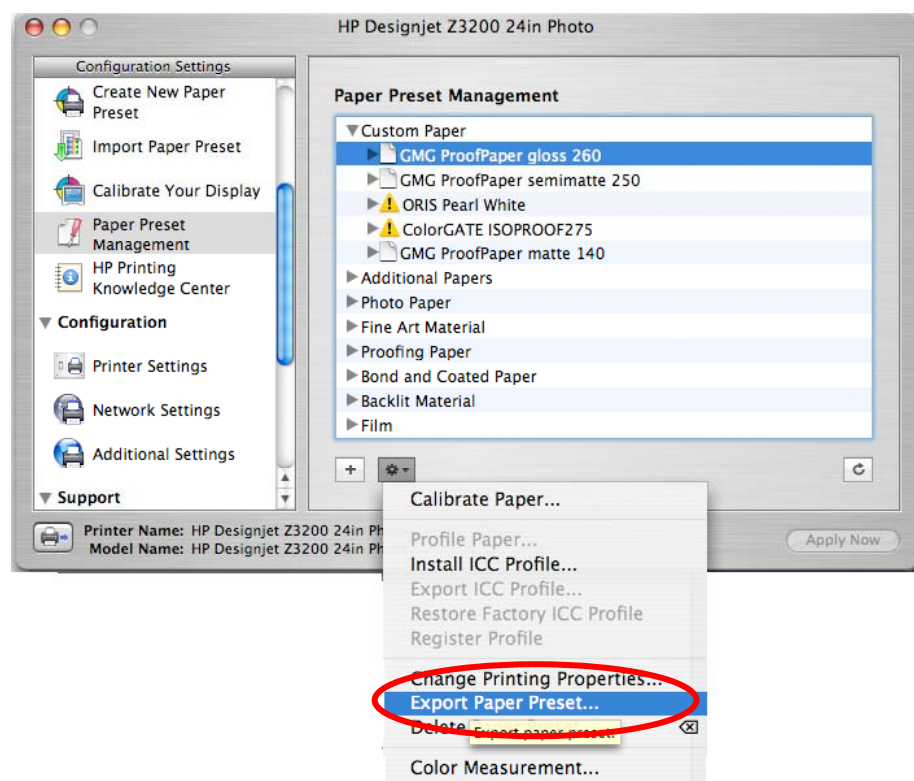


8. Click Continue.
9. The printer performs a color calibration (about 10 minutes) and creates the ICC profile (about 20 minutes).

Now that you have created the paper preset, you will be able to select the paper type from the front panel and from the driver under the Custom paper category. Also, the ICC profile for the new paper is installed in your computer and ready to be used by your imaging software.

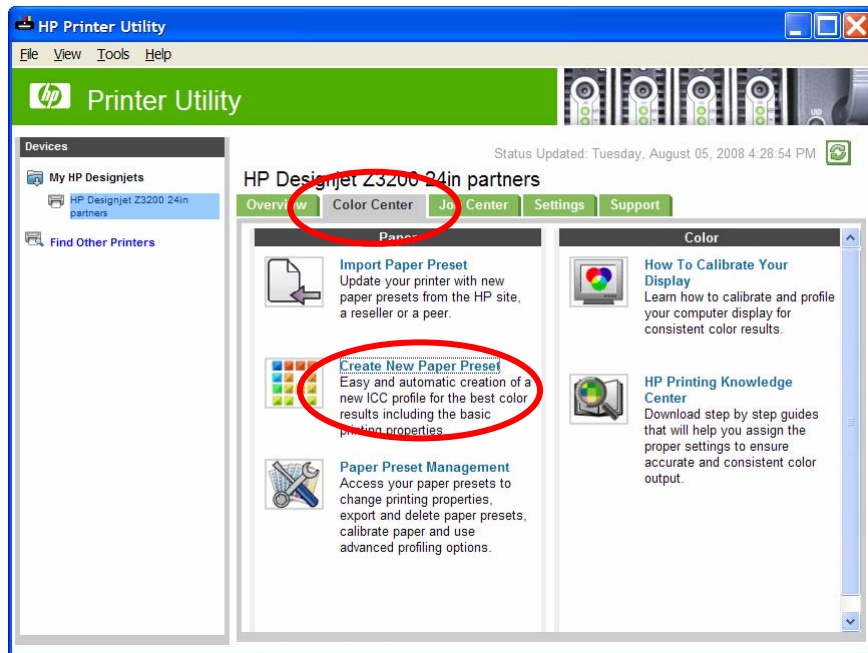
NOTE 1: Remember that if you had your imaging software application already open when you created the paper preset, you might need to restart the application so that the new ICC Profile appears.


NOTE 2: You can export the new paper preset to your computer so that you can share it or use it on other HP Designjet Z3200 Photo Printers. To do this, open the HP Color Center and select the paper preset that you want to export inside the Paper Preset Management menu. Then click on the wheel icon and select Export Paper Preset, and follow the instructions on the screen.

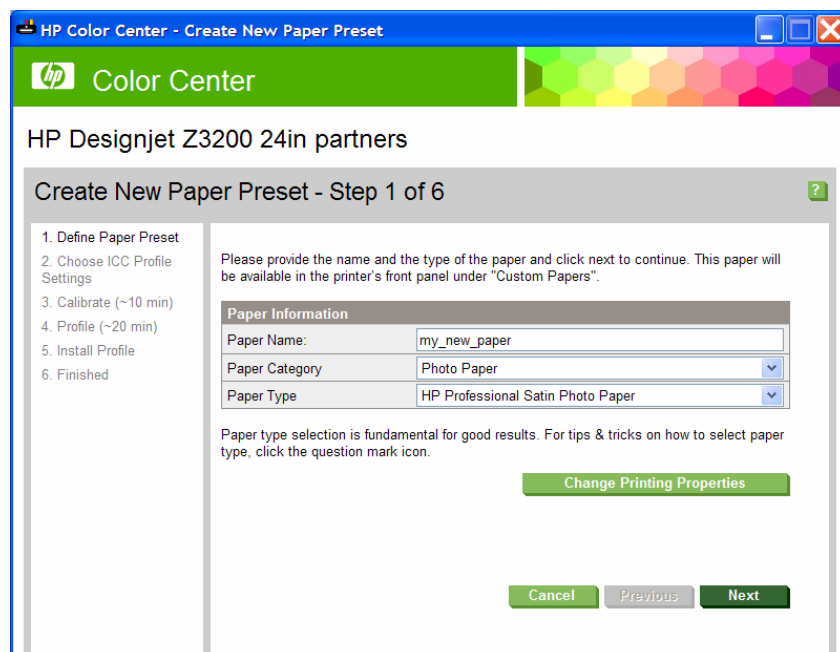


Steps for Windows users:

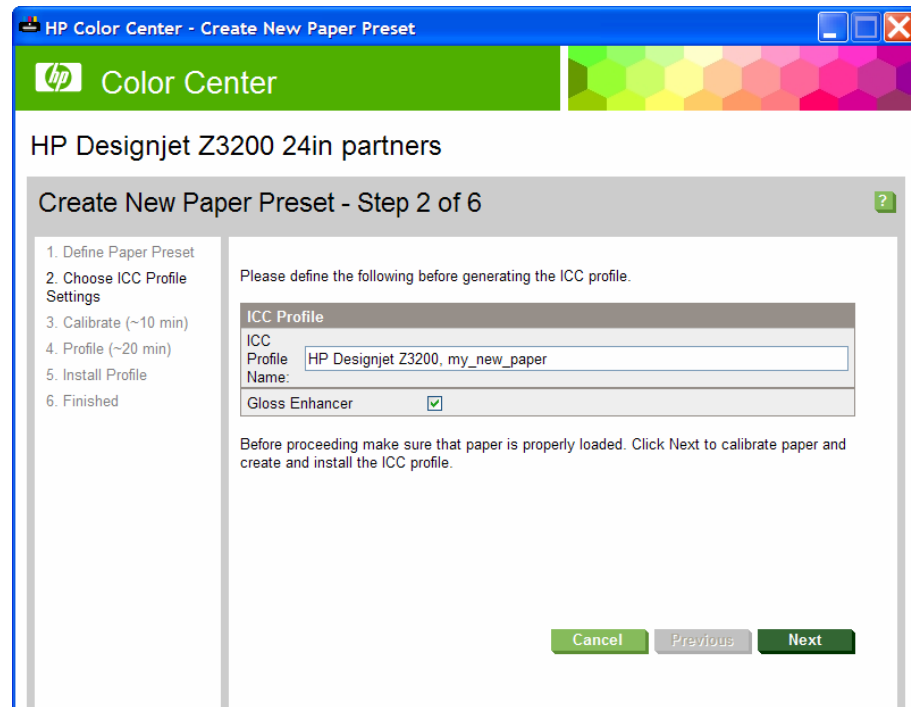
1. Open the HP Printer Utility application
2. Select the **Paper Preset Management** option from the HP Color Center tab, then the **Create New Paper Preset** option.



3. In the new window, enter your paper's name and select a paper type from the drop-down menu. The paper type determines the amount of ink used and other basic printing parameters. For more information, see the online help in the HP Color Center using the  button. A detailed description of each paper type is available in Appendix A, **Print Material Characteristics**.



4. Optionally, click on **Change Printing Properties** to fine-tune some basic settings like the cutter or paper thickness. Please see more details in the Advanced Paper Preset Creation section.
5. Click on **Next**.
6. Now go to your printer and load your paper. Once this is done, the printer front panel will ask you to select a paper name. You will find the new paper name (as you defined it in step 3 of this procedure) in the printer front panel, inside the **Main Menu > Paper Types List > Custom Papers** category. Go back to your computer.
7. Choose the ICC profile name. This is the name you will use to select the profile in your imaging software.



8. Click **Next**.
9. The printer performs a color calibration (about 10 minutes) and creates the ICC profile (about 20 minutes).

Now that you have created the paper preset, you will be able to select the paper type from the front panel and from the driver under the **Custom paper** category. Also, the ICC profile for the new paper is installed in your computer and ready to be used by your imaging software.

NOTE 1: Remember that if you had your imaging software application already open when you created the paper preset, you might need to restart the application so that the new ICC Profile appears.

NOTE 2: You can export the new paper preset to your computer so that you can share it or use it on other HP Designjet Z3200 Photo Printers. To do this, open the HP Color Center, select **Paper Preset Management > Export Paper Preset**, then follow the instructions on the screen.

Advanced paper preset creation

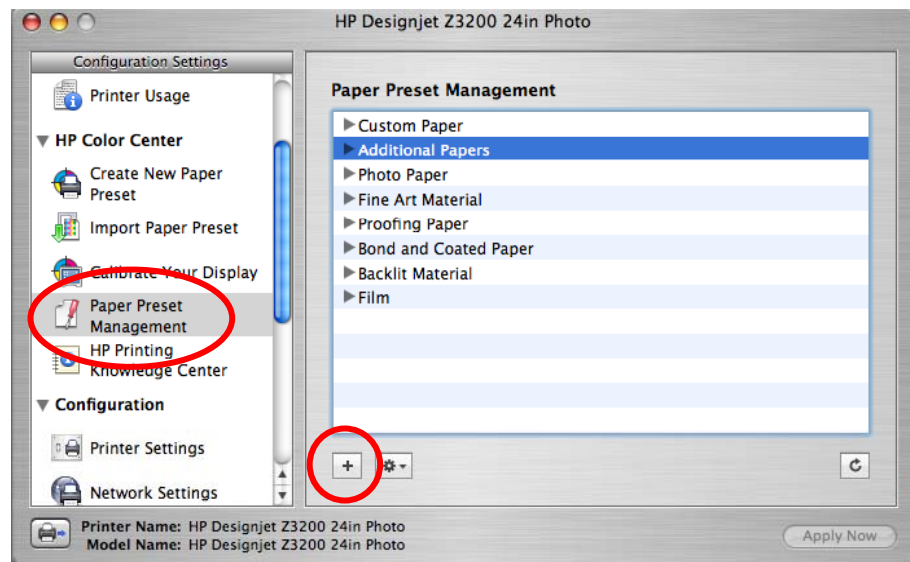
Advanced paper preset creation allows you detailed control of both printing and color characteristics. This process includes two separate phases:


- In the first phase you will go through an iterative process, in which you modify the printing properties and evaluate results to obtain the best image quality.
- The second phase is the ICC profile creation. In the present document, we provide details to do this with the HP Designjet Z3200 Photo Printer embedded profiler, although it can also be done with the Color Management facility or the HP Advanced Profiling Solution.

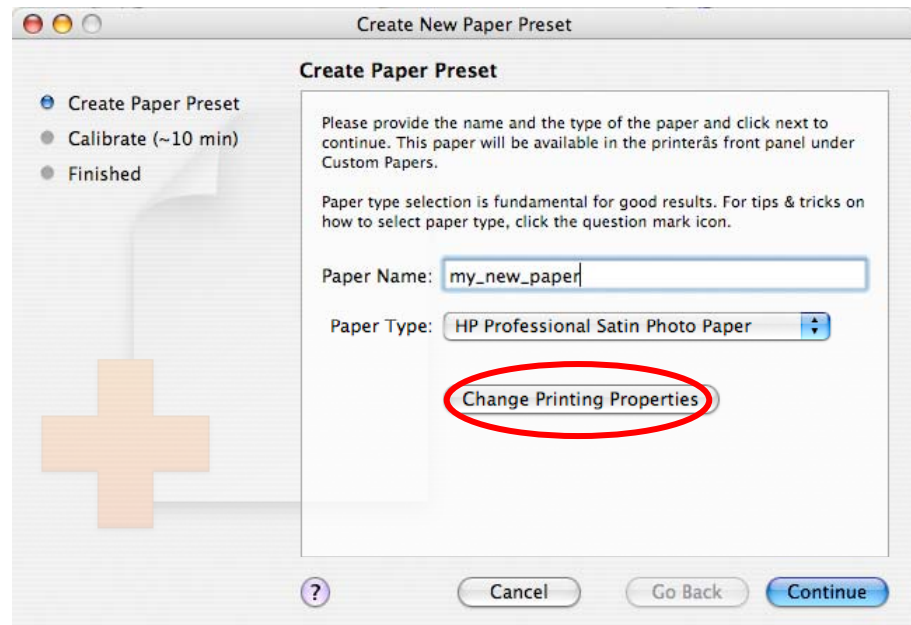
Steps for Macintosh users:

Phase one: printing properties fine-tuning

1. Open the HP Printer Utility application.
2. Select the option **Paper Preset Management** inside the HP Color Center, and then click on the  button.



3. Enter your paper's name and select a paper type from the drop-down menu. The paper type determines the amount of ink used and other basic printing parameters. For more information, see the online help in the HP Color Center:  button. A detailed description of each paper type is available in Appendix A, **Print Material Characteristics**.



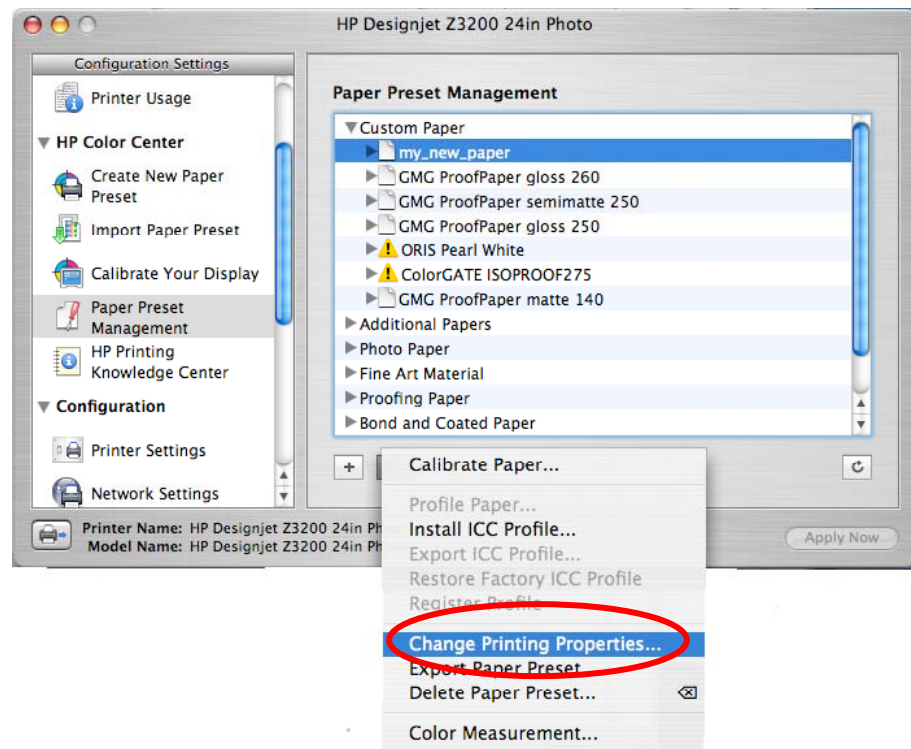
4. Optionally click on **Change Printing Properties**. to fine-tune the following:
 - Paper Thickness: This is relevant to carriage height or platen gap. You should choose *High* if your paper weighs over 250 g/m² or if it does not have a plastic coating.
 - Dry Time: The recommendation is to use *Automatic* by default and move to *Extended* if needed.
 - Star Wheels: Print with the star wheels up or down. It is recommended to have the star wheels up only for photo gloss/satin papers or if you perceive marks on media. For thick or rigid papers like Fine Art or Matte, it is recommended to have them down to avoid head crashes and waves on paper.
 - Cutter: Enable or disable the cutter (do not use the cutter on canvas or woven fabric-based materials similar to canvas)
 - Global Ink Limit: Initially, it can be left as it is and modified later on, based on printing results.
 - Gloss Enhancer Amount: Initially, it can be left as it is and modified later on, based on printing results.

NOTE: When an option is grayed out, that means that it is not available for the selected paper type or for your printer model.

5. Click OK to save the changes, this will close the window. Then click Continue.
6. Now go to your printer and load your paper. Once this is done, the printer front panel will ask you to select a paper name. You will find the new paper name (as you defined it in step 3 of this procedure) in the printer front panel, inside the Main Menu > Paper Types List > Custom Papers category. Go back to your computer.
7. Click Continue to start color calibration.
8. You can now print an image of your choice to check for color gamut, coalescence, mottle, bronzing, and gloss uniformity.

9. If you are happy with the results, go to step 11. If the results are not satisfactory, you can change printing properties and launch another calibration. Some hints on how you could improve image quality are:
- For better color gamut, increase the ink limit or select a "more ink" variant of the same paper type if available.
 - To reduce coalescence, decrease the ink limit and/or the amount of gloss enhancer or select a "less ink" variant of the same paper if available.
 - To reduce bronzing or improve gloss uniformity, increase the amount of gloss enhancer.
 - To reduce gloss banding, decrease the amount of gloss enhancer.

To change printing properties, go to HP Color Center, select **Paper Preset Management**, select the custom paper you've just created, and modify the printing preferences by selecting the option **Change Printing Properties**.



10. Once you have saved the printing properties changes, click on the Calibrate Paper option from the same drop down menu you can see in the figure above and follow the instructions on the screen. Go back to step 8.
11. Once you have satisfactory results, you will have completed the printing properties fine-tuning, which is the first part of this process. Now you can proceed to the second phase: the ICC profile creation (remember that paper presets include both printing parameters and ICC profile).

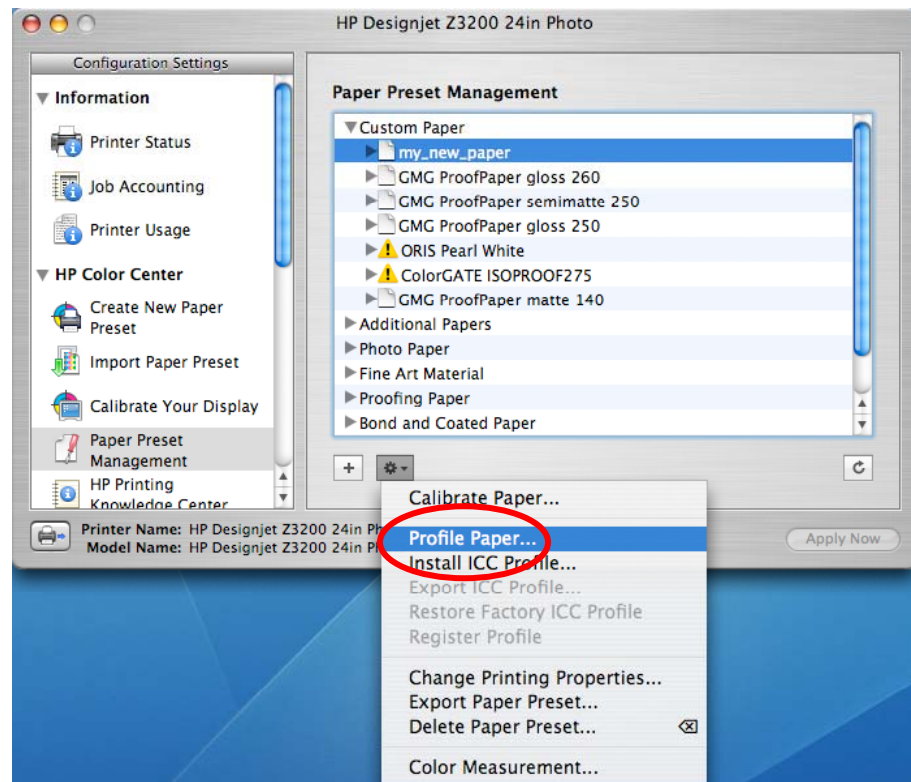
Phase two: ICC profile creation

You can create the ICC profile for the new paper preset using the HP Designjet Z3200 Photo Printer embedded profiler as explained below. Alternatively, you can create the ICC profile with the Color Management facility and an external profiler or through the HP Advanced Profiling Solution. For details on these last two methods please refer to the HP Designjet Z3200 Photo

Printer User Guide document, in the Color Measurement chapter or HP Advanced Profiling Solution chapter.

ICC profile creation using the HP Designjet Z3200 Photo Printer embedded profiler

Go to the **HP Color Center**, select the **Paper Preset Management** option, select the paper you have just created, and click on **Profile Paper**. A profiling chart is printed and the process takes about 15–20 minutes.



The new ICC profile is stored in the correct system folder on your computer, where your application programs can find it.

Now you will have completed the paper preset creation. You will be able to select the paper type from the printer front panel and from the driver under the Custom paper category. Also, the ICC profile for the new paper is installed in your computer and ready to be used by your imaging software.

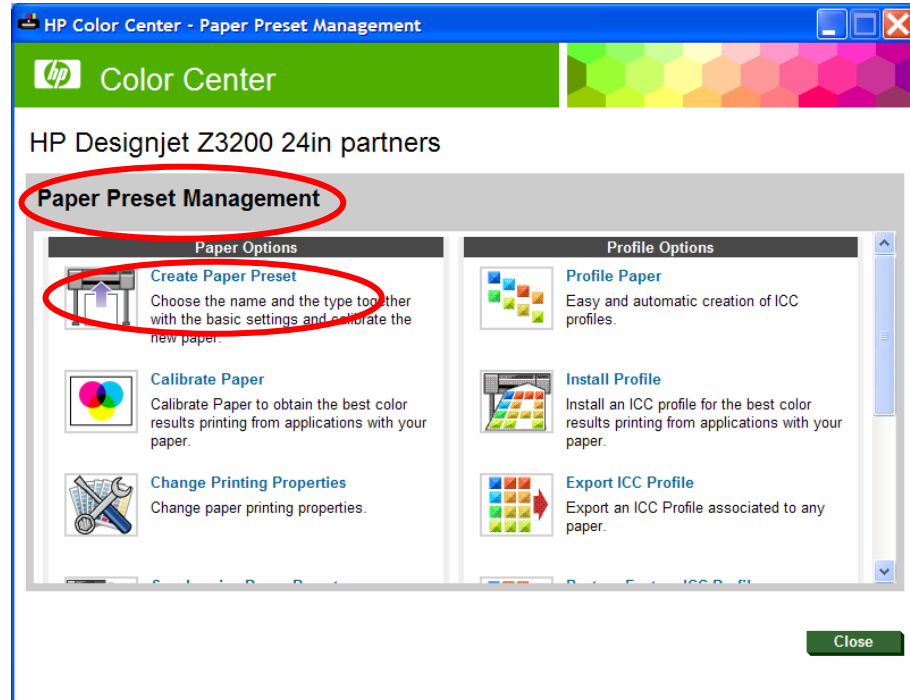
NOTE 1: Remember that if you had your imaging software application already open when you created the paper preset, you might need to restart the application so that the new ICC Profile appears.


NOTE 2: You can export the new paper preset to your computer so that you can share it or use it on other HP Designjet Z3200 Photo Printers. In the HP Color Center, select Paper Preset Management > Export Paper Preset, then follow the instructions on the screen.

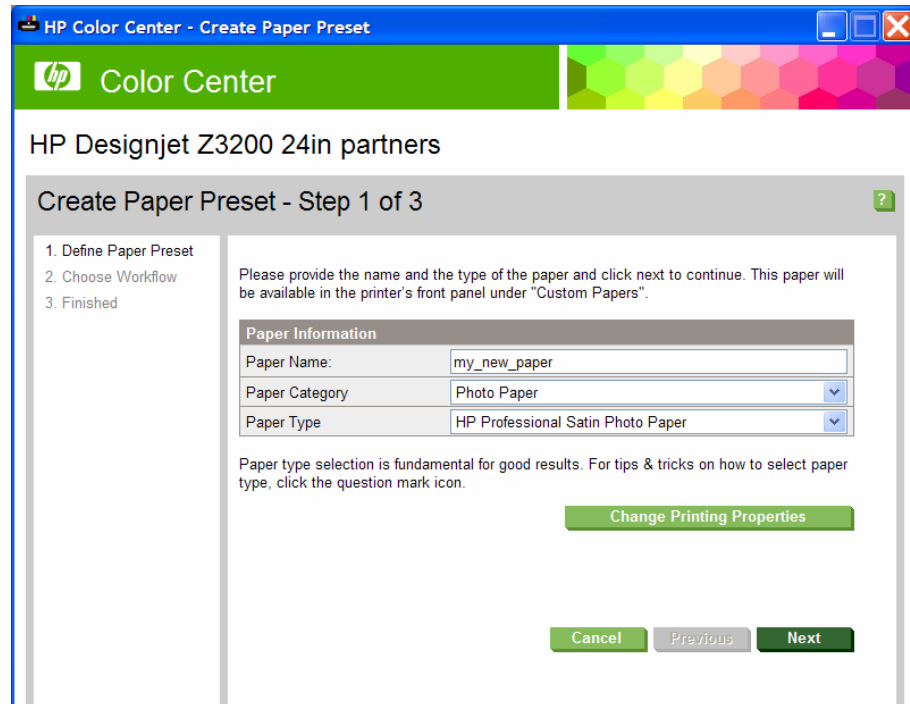
Steps for Windows users:

Phase one: printing properties fine-tuning

1. Open the HP Printer Utility application.
2. Select the option **Paper Preset Management**, then **Create Paper Preset** inside the HP Color Center.

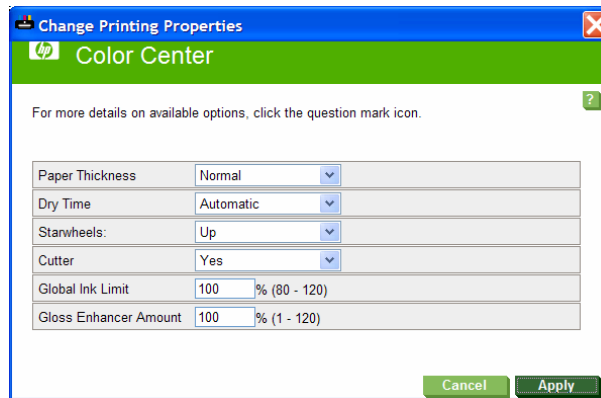


3. In the new window, enter your paper's name and select a paper type from the drop-down menu. The paper type determines the amount of ink used and other basic printing parameters. For more information, see the online help in the HP Color Center using the  button. A detailed description of each paper type is available in Appendix A, **Print Material Characteristics**.



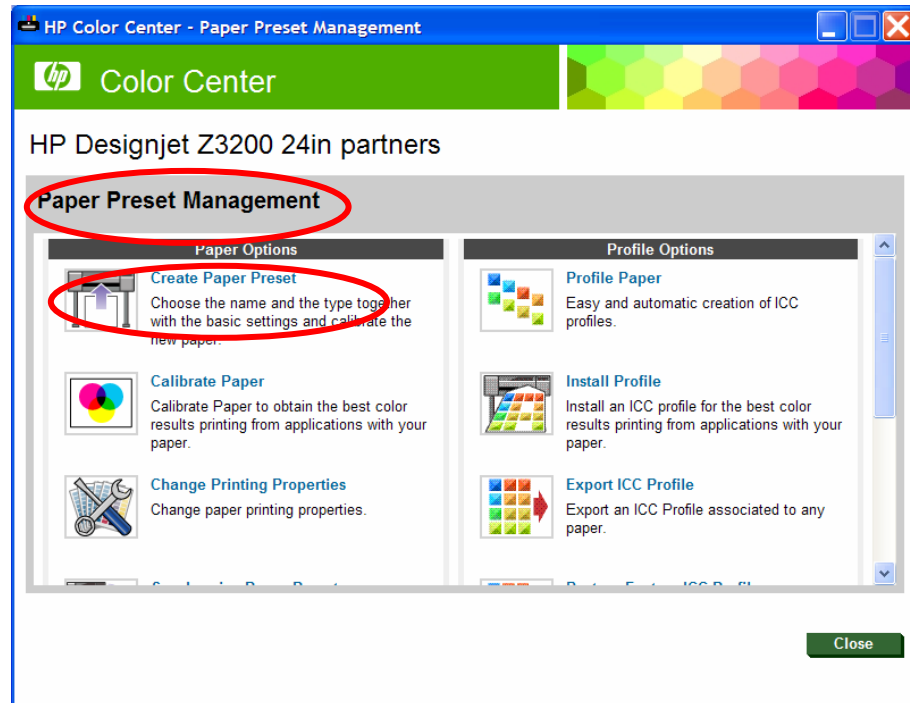
4. Click on **Change Printing Properties**. In this case, you can change the following properties:
- Paper Thickness: This is relevant to carriage height or platen gap. You should choose High if your paper weighs over 250 g/m² or if it does not have a plastic coating.
 - Dry Time: The recommendation is to use Automatic by default and move to Extended if needed.
 - Star Wheels: Print with the star wheels up or down. It is recommended to have the star wheels up only for photo gloss/satin papers or if you perceive marks on media. For thick or rigid papers like Fine Art or Matte, it is recommended to have them down to avoid head crashes and waves on paper.
 - Cutter: Enable or disable the cutter (do not use the cutter on canvas or woven fabric-based materials similar to canvas)
 - Global Ink Limit: Initially, it can be left as it is and modified later on, based on printing results.
 - Gloss Enhancer Amount: Initially, it can be left as it is and modified later on, based on printing results.

NOTE: When an option is grayed out, that means that it is not available for the selected paper type or for your printer model.



5. Click **Apply** to save the changes, this will close the window. Then click **Next**.
6. Now go to your printer and load your paper. Once this is done, the printer front panel will ask you to select a paper name. You will find the new paper name (as you defined it in step 3 of this procedure) in the printer front panel, inside the **Main Menu > Paper Types List > Custom Papers** category. Go back to your computer.
7. Click **Continue** to start the color calibration.
8. You can now print an image of your choice to check for color gamut, coalescence, mottle, bronzing, and gloss uniformity.
9. If you are happy with the results, go to step 11. If the results are not satisfactory, you can change printing properties and launch another calibration. Some hints on how you could improve image quality are:
 - **For better color gamut**, increase the ink limit or select a "more ink" variant of the same paper type if available.
 - **To reduce coalescence**, decrease the ink limit and/or the amount of gloss enhancer or select a "less ink" variant of the same paper if available.
 - **To reduce bronzing or improve gloss uniformity**, increase the amount of gloss enhancer.
 - **To reduce gloss banding**, decrease the amount of gloss enhancer.

To change printing properties, go to the HP Color Center, select **Paper Preset Management**, and select the custom paper you've just created. You can modify the printing preferences by selecting the option **Change Printing Properties**.



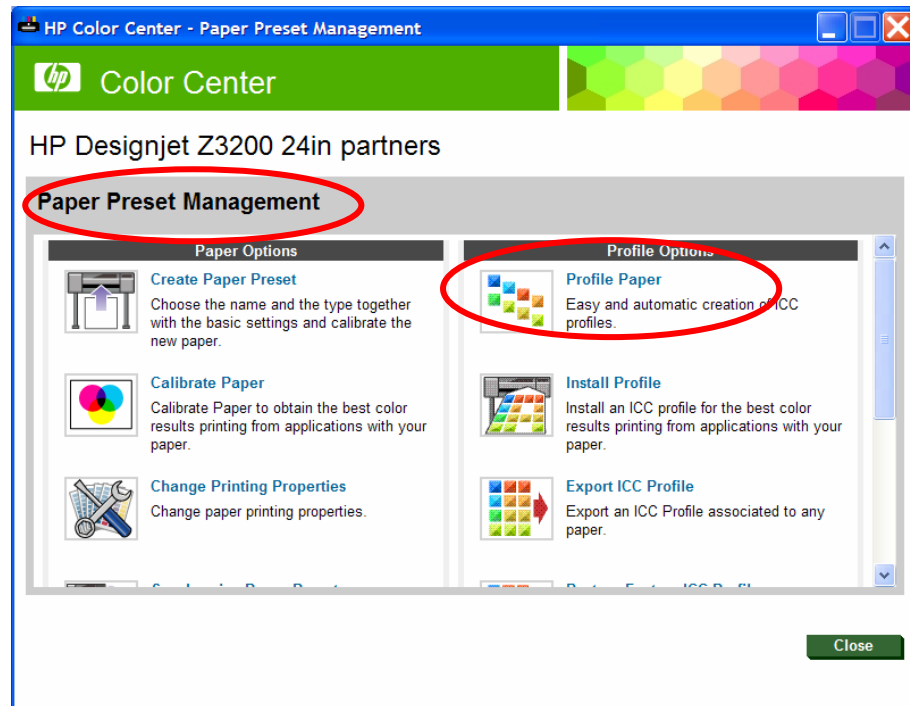
10. Once you have saved the printing properties changes, click on the **Calibrate Paper** option from the same **Color Center > Paper Preset Management** window you can see in the figure above and follow the instructions on the screen. Go back to step 8.
11. Once you have satisfactory results you will have completed fine-tuning of the printing properties, which is the first part of this process. Now you can proceed to the second phase: the ICC profile creation (remember that paper presets include both printing parameters and ICC profile).

Phase two: ICC profile creation

You can create the ICC profile for the new paper preset using the HP Designjet Z3200 Photo Printer embedded profiler as explained below. Alternatively, you can create the ICC profile with Color Management facility and an external profiler or through the HP Advanced Profiling Solution. For details on these last two methods please refer to the HP Designjet Z3200 Photo Printer User Guide document, inside the Color Measurement chapter or HP Advanced Profiling Solution chapter.

ICC profile creation using the HP Designjet Z3200 Photo Printer embedded profiler

Go to the HP Color Center, select the Paper Preset Management option, select the paper you have just created and click on Profile Paper. A profiling chart is printed and the process takes about 15–20 minutes.



The new ICC profile is stored in the correct system folder on your computer, where your application programs can find it.

Now you will have completed the paper preset creation. You will be able to select the paper type from the printer front panel and from the driver under the Custom paper category. Also, the ICC profile for the new paper is installed in your computer and ready to be used by your imaging software.

NOTE 1: Remember that if you had your imaging software application already open when you created the paper preset, you might need to restart the application so that the new ICC Profile appears.

NOTE 2: You can export the new paper preset to your computer so that you can share it or use it on other HP Designjet Z3200 Photo Printers. In the HP Color Center, select Paper Preset Management > Export Paper Preset, then follow the instructions on the screen.

Appendix A

Print material characteristics

Important notes:

When you choose the paper type in step 3 of the paper preset creation process—for both automatic and advanced paths—it is important to ensure that you select the one which is most similar to the new paper with which you are working. To make a good selection, consider type, finishing (Matte or Gloss), weight, and thickness according to the information provided in the tables below (Tables 1, 2, and 3).

For example, use “HP Universal Instant-dry Gloss” (190 g/m², 7.4 mil/188 microns) if you are loading a similar 190 g/m² gloss-like paper. Good examples of these are “dtec Photobase Universal 190 gsm” or “Océ Smart Dry Photo Paper Gloss” (190 g/m², 188 microns). Do NOT use, in this case, the “HP Premium Instant-Dry Gloss”, which is much heavier and thicker (260 g/m², 10.3 mil/260 microns).

Selecting the wrong basic medium to create a media profile can result in printing issues like poor color performance or the paper not being advanced accurately.

Finally, take into account the following:

- Do not use the cutter on canvas or woven fabric-based materials similar to canvas.
- Some paper types are available with different ink limits (less/normal/more ink). Ink limits are generally proportional to color gamut volume, but a higher ink limit can cause printing artifacts (bleed, coalescence, etc.) in some cases. HP papers have fine-tuned ink limits while other papers use generic ink limits.

Table 1: Definition of Print Characteristics

Name	Value	Comments
Gloss Enhancer	Yes (Y) / No (N)	Indicates whether HP Gloss Enhancer can be used (applies to Glossy, Semi-gloss/Satin finishes)
Borderless	Yes (Y) / No (N)	Indicates whether it is possible to print without margins (applies to roll paper only)
Carriage Height	High (H) / Low (L)	Carriage height has 2 positions. For paper weights over 250 g/m ² , the recommended paper type selection is a "High" setting (avoids printhead crashing into the paper)
Star wheels Height	High (H) / Low (L)	Star wheels rail has 2 positions. For fragile papers that don't need cockle control, the "High" setting is recommended
Printing Black	Photo Black (P) Matte Black (M) HP Quad-black (Q)	This setting indicates which inks are used when printing black: Photo black + grays Matte black + grays The full HP Quad-black system (matte black + photo black and 2 levels of gray)
Ink Limit		Indicates the total amount of ink the paper can absorb to maximize gamut without causing image-quality problems. This setting is expressed in picoliters (or nanograms) per 1/600th x 1/600th inch paper area (divide by 4 for 1/1200th by 1/1200th inch area). In general, the higher the ink limit, the higher the gamut.
Print Mode "Best Quality" or slider in the right position	Rendering Resolution (RR)	Resolution at which the image is rasterized/processed in the host (in pixels per printed inch, or pppi)
	Printing Resolution (PR)	Resolution at which the image is printed (in dots per inch, or dpi)
	Other info (OI)	# passes
Bidirectional		Determines whether printing occurs when the carriage is traveling in a single direction only (Unidirectional) or in both directions (Bidirectional). Unidirectional modes typically produce better image quality – depending on the number of passes – but at lower speeds.
Automatic Cutter	Yes (Y) / No (N)	Indicates whether cutting will be performed. Even if "Yes" is selected, cutting can be disabled later through the driver. However, if "No" is selected, cutting cannot be re-enabled through the driver.

Table 2: Original HP Printing Material Print Characteristics

	Original HP Printing Material Type	Gloss Enhancer	Borderless	Carriage Height	Star Wheels Height	Printing Black	Ink Limit	Print mode (Best)			Auto Cutter
								R	PR	OI	
								R	R	OI	
Photo Paper	HP Professional Satin Photo Paper	Y	Y	L	H	P	46.0	60	1200x1200	14pBidi	Y
	HP Baryte Photo Paper	Y	Y	H	L	P	46.0	60	1200x1200	14pBidi	Y
	HP Premium Instant-dry Gloss Photo Paper	Y	Y	L	H	P	46.0	60	1200x1200	16pBidi	Y
	HP Premium Instant-dry Satin Photo Paper	Y	Y	L	H	P	46.0	60	1200x1200	16pBidi	Y
	HP Premium Matte Photo Paper	N	N	H	L	M	30.0	60	1200x1200	8pUni*	Y
	HP Everyday Pigment Ink Gloss Photo Paper	Y	Y	L	H	P	37.5	60	1200x1200	14pBidi	Y
	HP Everyday Pigment Ink Satin Photo Paper	Y	Y	L	H	P	37.5	60	1200x1200	14pBidi	Y
Fine Art Paper	HP Professional Matte Canvas	N	N	H	L	M	42.0	60	1200x1200	16pBidi	N
	HP Collector Satin Canvas	N	N	H	L	M	42.0	60	1200x1200	16pBidi	N
	HP Artist Matte Canvas	N	N	H	L	M	42.0	60	1200x1200	16pBidi	N
	HP Hahnemühle Smooth Fine Art Paper	N	N	H	L	M	42.0	60	1200x1200	8pUni*	Y
	HP Hahnemühle Textured Fine Art Paper	N	N	H	L	M	42.0	60	1200x1200	8pUni*	Y
	HP Matte Litho-realistic Paper	N	N	H	L	M	42.0	60	1200x1200	8pUni*	Y
Proofing Paper	HP Professional High-gloss Contract Proofing Paper	Y	Y	L	H	P	46.0	60	1200x1200	14pBidi	Y
	HP Professional Semi-gloss Contract Proofing Paper	Y	Y	L	H	P	46.0	60	1200x1200	14pBidi	Y
	HP Premium Semi-gloss Proofing Paper	Y	Y	L	H	P	46.0	60	1200x1200	14pBidi	Y
	HP Matte Proofing Paper	N	N	H	L	M	30.0	60	1200x1200	8pUni*	Y
Coated	HP Super Heavyweight Plus Matte Paper	N	N	H	L	Q	60.0	60	1200x1200	8pUni*	Y
	HP Heavyweight Coated Paper	N	N	H	L	M	30.0	60	1200x1200	8pUni*	Y
Backlit	HP Premium Vivid Color Backlit Film	N	N	H	H	Q	60.0	60	1200x1200	16pBidi	Y

* on these papers, some colors might be printed in bidi.

Table 3: Other commercially-available papers Characteristics

	Other Commercially-available Paper Type	Gloss Enhancer	Borderless	Carriage Height	Star Wheels Height	Printing Black	Ink Limit	Print mode (Best)			Auto Cutter
								RR	PR	OI	
Photo Paper	Photo Gloss/Semi-Gloss/Satin Paper	Y	Y	L	H	P	37.5	600	1200x1200	14pBidi	Y
	Photo Gloss/Semi-Gloss/Satin Paper (less ink)	Y	Y	L	H	P	32.5	600	1200x1200	14pBidi	Y
	Photo Gloss/Semi-Gloss/Satin Paper (more ink)	Y	Y	L	H	P	46.0	600	1200x1200	14pBidi	Y
	Photo Pearl Paper (less ink)	Y	Y	H	L	P	32.5	600	1200x1200	14pBidi	Y
	Photo Pearl Paper (more ink)	Y	Y	H	L	P	46.0	600	1200x1200	14pBidi	Y
	Photo Baryte Paper	Y	Y	H	L	P	32.5	600	1200x1200	14pBidi	Y
	Photo Matte Paper	N	N	H	L	M	30.0	600	1200x1200	8pUni*	Y
Fine Art Paper	Canvas (less ink)	N	N	H	L	M	30.0	600	1200x1200	16pBidi	N
	Canvas (more ink)	N	N	H	L	Q	60.0	600	1200x1200	16pBidi	N
	Fine Art Paper (less ink)	N	N	H	L	M	42.0	600	1200x1200	8pUni*	Y
	Fine Art Paper (more ink)	N	N	H	L	Q	60.0	600	1200x1200	8pUni*	Y
	Fine Art Pearl Paper (less ink)	N	Y	H	L	P	32.5	600	1200x1200	16pBidi	Y
	Fine Art Pearl Paper (more ink)	N	Y	H	L	P	46.0	600	1200x1200	16pBidi	Y
Proofing Paper	Proofing Gloss Paper	Y	Y	L	L	P	37.5	600	1200x1200	14pBidi	Y
	Proofing Semi-Gloss/Satin Paper	Y	Y	L	L	P	37.5	600	1200x1200	14pBidi	Y
	Proofing Matte Paper	N	N	H	L	M	30.0	600	1200x1200	8pUni*	Y
Coated	Plain Paper	N	N	H	L	M	21.0	600	1200x1200	8pUni	Y
	Bright White Bond Paper	N	N	H	L	M	21.0	600	1200x1200	8pUni	Y
	Coated Paper	N	N	H	L	M	21.0	600	1200x1200	8pUni	Y
	Heavyweight Coated Paper	N	N	H	L	M	30.0	600	1200x1200	8pUni*	Y
	Super Heavyweight Coated Paper	N	N	H	L	Q	60.0	600	1200x1200	8pUni*	Y
Backlit	Backlit Material	N	N	H	H	Q	60.0	600	1200x1200	16pBidi	Y
Film	Transparent/Clear Film	N	N	H	L	M	37.5	600	1200x1200	16pBidi	Y
	Matte Film	N	N	H	L	M	30.0	600	1200x1200	8pUni*	Y

* on these papers, some colors might be printed in bidi.

Appendix B

FAQ

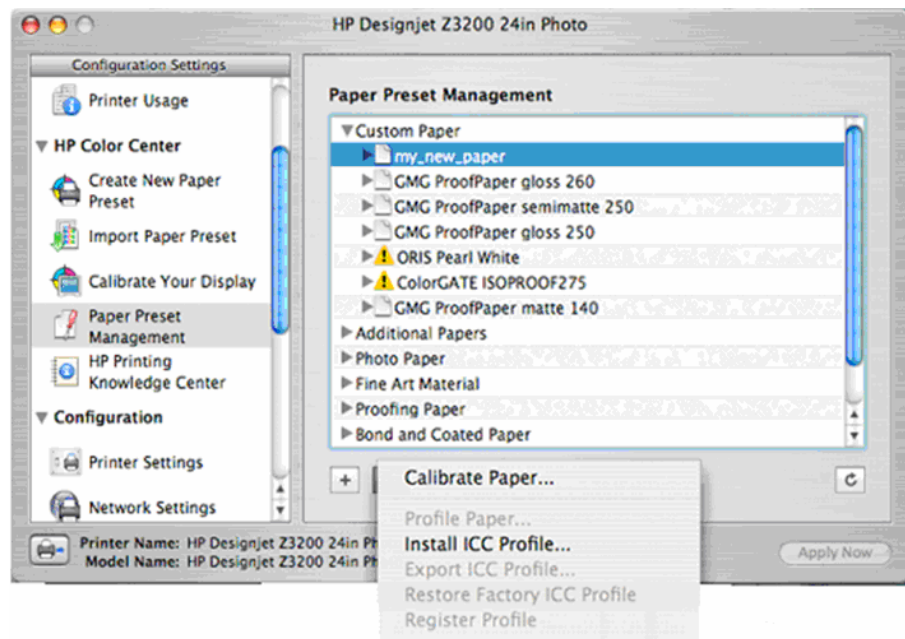
Why is it recommended to use a paper preset rather than a standalone ICC profile with other commercially available papers?

A paper preset is an installable package that extends the default selection of papers pre-installed on your printer. It contains all the necessary settings and parameters to work with optimal image quality, productivity, and reliability with your added media. The paper presets include the ICC profile and many additional settings related to the printer-ink-paper interaction, like: total ink volume, gloss enhancer volume, star wheels position, media name, etc... This means that the printer changes the way it prints according to the paper requirements which are included in the paper presets but not in the ICC profiles alone.

If required, the HP Printer Utility can modify the parameters mentioned above in order to obtain the best possible results with the HP Designjet Z3200 Photo Printer. Also, once the package is installed on the printer, the ICC profile can then be extracted using the Printer Utility.

Why is it sometimes not possible to create an ICC profile for a paper?

If color calibration has either not been performed for a paper or if it is obsolete, it is not possible to create an ICC profile for this paper. In this case, the Profile Paper option is grayed out.



To solve this problem, load the paper in the printer, select the paper type that should be calibrated, then select the following option from the printer front panel:

Main Menu > Image Quality Maintenance > Color Calibration. After the color calibration, you will be able to create an ICC profile.

You can also calibrate your paper through the Printer Utility. From the Paper Preset Management option of the Color Center, select the paper you want to calibrate and click on the wheel icon. Then select Calibrate Paper and follow the instructions on the screen.

Why is the paper preset that I have just created grayed-out in my Mac driver?

In Mac OS X v10.5, when you try to select the paper preset that you have just created in your paper type list on the driver, it might be grayed-out. This is a problem of interaction between the color settings and the paper types in this operating system version. Just select 'Any' in the paper type list of the driver, and the printer will work with the paper preset that you have selected in the front panel of your printer.

If I change the properties of a paper preset through the Change paper properties option, do I need to calibrate and profile the paper again?

When you change certain settings like the Gloss Enhancer amount, the global ink limit, or the carriage position, it is recommended to calibrate the paper and create the ICC profile again. These settings change parameters that are relevant for the amount of ink used and the position of the ink on the paper so calibration and profiling will be needed again. If you change the cutter or the star wheel position, it is not necessary to recalibrate or reprofile.

How many paper presets can I install in my printer?

The number of paper presets that you can install in your printer is limited to 30. This includes the paper presets that you download from the Web and the paper presets that you create through the Printer Utility 'Create Paper preset' option.

If you want to delete a paper preset to make room for installing another one, please follow these instructions:

Steps for Mac users:

1. Select the paper that you want to delete from the Paper Preset Management screen in the HP Printer Utility.
2. Click on the wheel icon and then click on 'Delete Paper Preset'

Steps for Windows users:

1. Go to Paper Preset Management inside the Color Center and select Delete Paper Preset. Follow the instructions on the screen.

How to download the latest available firmware and drivers

Go to the **HP Knowledge Center** at: www.hp.com/go/Z3200/knowledgecenter or www.hp.com/go/Z3200ps/knowledgecenter (depending on your printer model).

On the upper, right-hand side of the page (in the orange box), click on the "Drivers, software and firmware" tab.

How to get the most up-to-date information about Original HP printing material

HP printing material is a critical component of the HP Designjet printing system. HP Designjet printers, ink cartridges, Vivera pigment inks, and printing material are engineered as a single, complete printing system to ensure flawless compatibility and optimum performance. Together with HP Designjet printers and printing supplies, HP large-format printing material is precisely

engineered to deliver an unmatched combination of outstanding photo-image quality, water resistance, and exceptional fade resistance², delivering the printing system reliability expected from HP. This commitment leads to outstanding print quality and consistency from roll to roll.

For the best value, customers currently using other commercially-available paper should consider trying Original HP printing material. Reliable performance and results ultimately save time and money.

For the most up-to-date information about Original HP printing material, designed to work better together with your HP Designjet Z3200 Photo Printer series, visit:
www.hp.com/go/designjet/supplies .

² Display permanence rating for interior displays/away from direct sunlight by HP Image Permanence Lab, and by Wilhelm Imaging Research, Inc. on a range of HP paper. Water resistance and interior in-window display ratings by HP Image Permanence Lab on a range of HP paper. For details: www.hp.com/go/supplies/printpermanence.

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