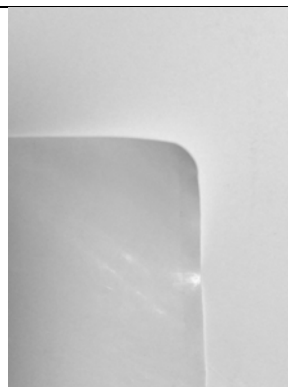


## PantoneLIVE Library Specification

### Label Flexo UV Wht Film

PantoneLIVE Library Specification												
Master Standard Source Library	PANTONE PLUS Formula Guide Coated											
Dependent Standard Source Library	Label Flexo UV Wht Film Generic Dependent Library for PANTONE PLUS Coated											
Dependent Standard Code	FUWF											
Printing Process	Flexography											
Common Substrate Name	Wht Film											
Optimal Line Screen Ruling	110-133 LPI											
Ink Film Thickness	Medium											
Ink System	UV Cured											
Finishing	None											
Appropriate Use	Not Specified											
Application Examples	Labels											
Measurement Specification	Measurement Device	Geometry	Filter	Calibration Standard								
	SpectroEye	45/0	None	XRGA								
Measurement Backing Material	Fully opaque white backing card, with the following L*a*b* range											
	D50 2° L*			D50 2° a*			D50 2° b*			D50 2° C		D50 2° H
	Target	Min	Max	Target	Min	Max	Target	Min	Max	Target	Target	
	93.71	93.37	94.00	-0.56	-0.60	-0.10	3.00	2.78	4.40	3.06	100.47	
Substrate White Point	D50 2° L*			D50 2° a*			D50 2° b*			D50 2° C		D50 2° H
	Target			Target			Target			Target		Target
	95.66			-0.30			2.32			2.34		97.37
Library Includes Tints	No											
Release Date	May 13, 2013											



This library consists of the complete set of colors in the PANTONE PLUS Formula Guide Coated, and includes data for the solid (full-strength). All data values have been measured with an X-Rite SpectroEye with No Filter and comply with the X-Rite Graphics Arts Standard (XRGA).

The New 336 Colors released in 2012 are not included in this set at this time.

This library and associated data values are all available on the Public PantoneLIVE™ server, accessible from your PantoneLIVE-enabled software when using the public URL: <https://ws.pantone.live.com>.

## PantoneLIVE Library Specification

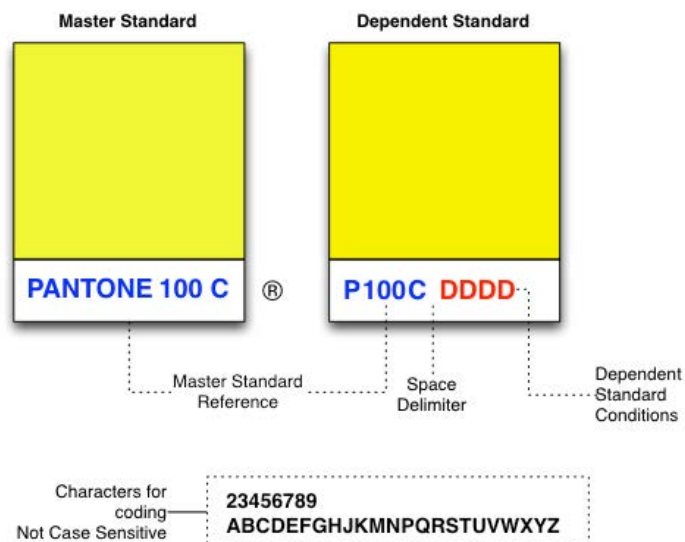
### About Dependent Standards

PantoneLIVE Dependent Standards are digitally characterized, representative examples of the PANTONE PLUS series colors (PANTONE MATCHING SYSTEM®) reproduced using a given printing process and typical substrate. Dependent Standards are inherently specific because they contain precise spectral data and associated descriptive metadata. Dependent Standards are proven to be achievable because they are made from real materials and relevant processes. As a result, the process of predicting production results via softcopy- or hardcopy - proofing system based on Dependent Standards is accurate. Likewise, a color formulation from spectral data, while accounting for substrate and ink application variation, is fast and straightforward. Finally, on-press production set-up is streamlined because the targets are known and known to be feasible.

PantoneLIVE Dependent Standards are easy to integrate into your workflow and color vocabulary, as their names are immediately recognizable derivatives of current PANTONE Colors you use in your workflow today.

All other color names follow the same convention:

- The word PANTONE is replaced by a capital “P”
- All spaces are removed
- The “C” is retained to indicate the original PANTONE Coated substrate of the Master Standard
- A unique 4 alpha/numeric character code is appended after a space, which is indexed to a distinct set of Dependent Standard conditions, including such attributes as substrate, printing process, finish, etc.
- All Dependent Standard names are unique



## PantoneLIVE Library Specification

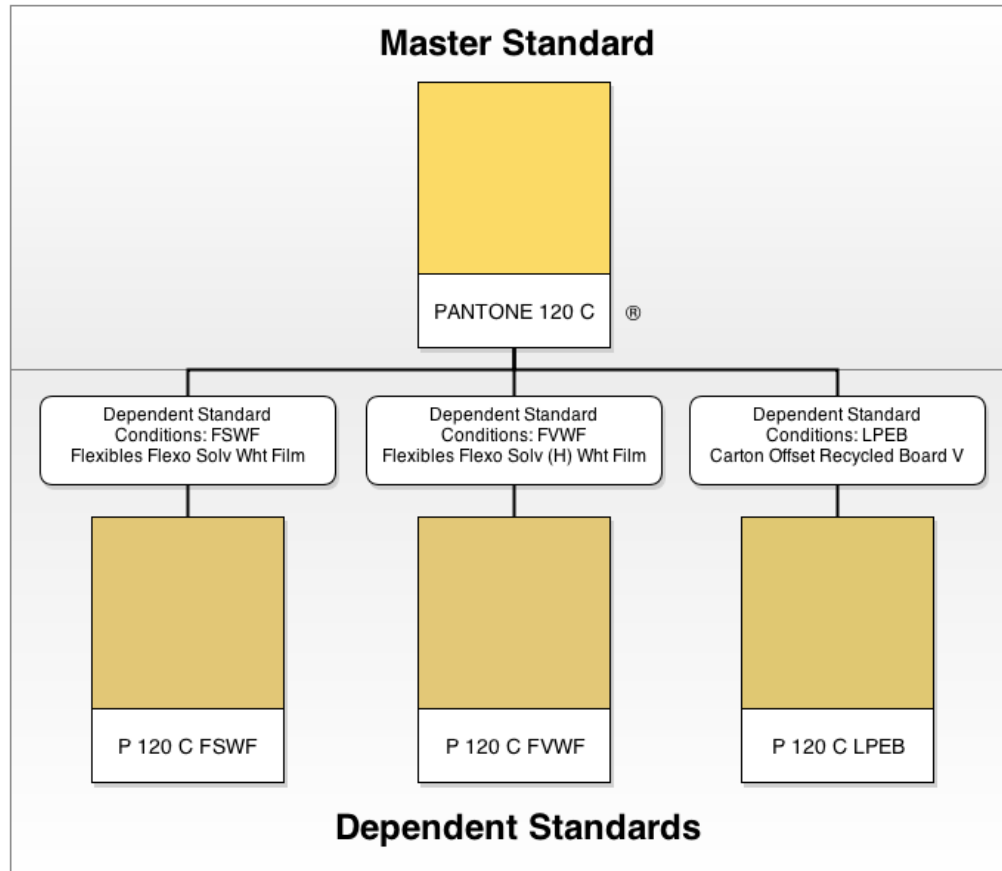


Figure 1: Dependent Standard Naming example for multiple Dependent Standard conditions

For its standard print publications PANTONE uses the letter “C” to indicate a coated substrate and “U” to indicate uncoated. PANTONE Coated and Uncoated colors are created from the same ink recipe on different substrates, and should not be confused with Dependent Standards. PANTONE 120 C and PANTONE 120 U are two distinct colors from the same ink formula, so each would serve as unique PantoneLIVE Master Standards, and will have unique Dependent Standard versions.

When brand owners integrate PantoneLIVE Dependent Standards into their own designs, it is possible that they will use “Alias” names in place of the traditional PantoneLIVE Dependent Standard Name. A brand owner may use PANTONE values without visible reference to the original name maintaining a clean identity to their own products. Regardless of use of original Dependent Standard name or a custom name, every colour identity in the PantoneLIVE cloud will be unique, creating unambiguous reference in design documents and written communication of color requirements.



## PantoneLIVE Library Specification

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### About PantoneLIVE Tints

PantoneLIVE offers an innovative solution for working with tonal (tint) data. PantoneLIVE Dependent Standard data contain tonal information. PantoneLIVE savvy applications make use of this data and provide more accurate predictions for design elements such as gradients and vignettes.

Before you start working with PantoneLIVE tonal data, it is important to recognize how this data is built, and what it represents.

Tonal data represents the spectral data produced when a specific apparent dot area is rendered. A 50% tint provided by PantoneLIVE does not relate to the 50% input dot you specify in an application like Adobe Illustrator. If you specify 50% in Illustrator and your printing process is known to gain 25% (50% becomes a 75% measured dot) the PantoneLIVE 75% dot will accurately represent the colour you can expect to see on final output.

While it is true a 50% tint gaining 30% and a 70% tint gaining 10% can appear different from the perspective of printing dot quality, the common 80% achieved apparent dot compares to the same Lab or spectral value provided general best practices in ink mixing, prepress and printing are observed.

To take advantage of the tonal data delivered by PantoneLIVE use software that understands these concepts and enables specification of dot gain to design elements. Esko software and the Pantone Color Book and Color Book plugins are ready to enable this capability.

To ensure your final product adheres closely to the expectations set by the PantoneLIVE tonal data, it is important to consider spectral, or multi-illuminant, matching in your ink mixing process. Simple D50 2° formulation matches that are significantly metameric can produce poor matches in non-solid areas of your design.

In general X-Rite recommends the best practice of matching to best-fit spectral targets defined in the PantoneLIVE Dependent Standards.

While this library does not include tints at this time, tints will be added for each color of the library in a future release.



## PantoneLIVE Library Specification

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### About XRGAs

Since 2010 all new X-Rite Graphic Arts hardware has conformed to XRGAs metrology. The most central component, starting with a very well controlled ISO 17025 internal metrology system at X-Rite, is the white calibration function and its conformance to NIST traceable Master Standards. Additional tuning of the hardware's system response removes any effect of historical/legacy offsets to prepare for the best common future industry accepted performance. In addition to the hardware focus, the digital data for PANTONE Color publications for the Graphic Arts are also fully compliant with XRGAs metrology – making X-Rite and Pantone solutions perform cohesively.

While integrating the PantoneLIVE Dependent Standard Libraries in software or workflow, numeric comparisons should only be performed with XRGAs compliant measurement devices and with other XRGAs data or color difference results will be misleading.

### About X-Rite

X-Rite is a global leader in color science and technology. The Company, including design industry color leader Pantone LLC, develops, manufactures, markets and supports innovative color solutions through measurement systems, software, color standards and services. X-Rite's expertise in inspiring, selecting, measuring, formulating, communicating and matching color get color right the first time and every time, achieving better quality and reduced costs. X-Rite serves a range of industries, including printing, packaging, photography, graphic design, video, automotive, paints, plastics, textiles, dental and medical. For further information, please visit <http://www.xrite.com>.

### About Pantone

Pantone LLC, a wholly owned subsidiary of X-Rite, Incorporated, has been the world's color authority for nearly 50 years, providing design professionals with products and services for the colorful exploration and expression of creativity. Always a source for color inspiration, Pantone now offers paint and designer-inspired products and services for consumers. More information is available at [www.pantone.com](http://www.pantone.com).

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## PantoneLIVE Library Specification

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