



The color of ideas.<sup>SM</sup>



## PANTONE<sup>®</sup> Goe<sup>™</sup>

Since the inception of the PANTONE MATCHING SYSTEM, Pantone has asked designers how to improve it. The top request has consistently been to “add more colors!” Further, designers want them chromatically arranged, a color system that is easy-to-use and one that spans international borders and all types of media applications. Rather than continue to develop a 45-year old system, Pantone acknowledged the changing needs of its design customers by introducing the PANTONE Goe System for spot color specification. However, designers were not the only ones consulted on how to construct Goe (pronounced “Go”). To ensure that it will address both current and future market needs, printers, digital software and ink and paper manufacturer were also consulted.

### 2,058 Goe Colors

PANTONE Goe was created from the ground up to answer the needs of designers for a color communication system which offers 2,058 easy to locate and specify color choices. The System also meets the

desires of printers and ink manufacturers for inks that are readily available, simple to mix and match, and easily reproduced on press.

Goe was built with the latest knowledge of advanced color science, color measuring techniques and digital color display and print environments to ensure that it would be extremely versatile and effective in the rapidly expanding world of digital design, animation and print. Goe components are printed using Pantone’s specially engineered presses and precise production processes under a Quality Management (ISO 9001:2000) infrastructure, Goe products include:

- PANTONE GoeGuide<sup>™</sup> coated, uncoated – color selection and communication fan guides
- PANTONE GoeSticks<sup>™</sup> coated, uncoated – adhesive-backed color specification chips
- PANTONE GoeBridge<sup>™</sup> guide coated – Goe colors printed as solids next to their CMYK equivalents

## MEETING THE NEEDS OF PRINTERS

In developing the new System, Pantone color scientists chose to use ink mixing bases that were readily available worldwide to ensure color consistency on a global basis. To mitigate change in color appearance, it was equally important for them to be highly compatible with, and receptive to, aqueous and UV coatings.

Visual color shifts from the application of coatings are a familiar problem for printers, particularly in the flexographic and packaging sectors where UV coatings are most common. Additionally, by utilizing only ten PANTONE Mixing Bases, the ink inventory required by printers to mix the PANTONE Goe Colors is kept to a minimum.

## INK MIXING BASES

The foundation of the PANTONE Goe System is the ten PANTONE Goe Mixing Bases, plus PANTONE Clear. This is a change from the original PANTONE MATCHING SYSTEM® of 14 base inks plus transparent white. Pantone's understanding of color science has enabled it to now deliver more colors with a smaller and simpler set of bases. It is the varying combinations of these inks that yield the 2,058 new PANTONE Colors that comprise the System. Six of the Goe mixing bases are the same as the PANTONE MATCHING SYSTEM but have been given a new name.

### GOE Mixing Bases

- PANTONE Medium Yellow
- PANTONE Bright Orange
- PANTONE Bright Red
- PANTONE Strong Red
- PANTONE Pink
- PANTONE Medium Purple
- PANTONE Dark Blue
- PANTONE Medium Blue
- PANTONE Bright Green
- PANTONE Neutral Black
- Plus PANTONE Clear

## BETTER INK CONTROL

Goe Colors were designed to be printed with uniform and industry typical ink film thicknesses. This enables equal drying times and more control for matching color on press. The press operator can run at the same ink settings, regardless of color being printed. Because press time is one of the most expensive parts of the printing process, the time and cost savings attributable to this feature can be quite significant.

Like the original PANTONE FORMULA GUIDE, the PANTONE GoeGuide provides printers the ink mixing formulas needed to create its colors. In acknowledgement of industry trends, Pantone prints the GoeGuide on #1 grade 100 lb coated offset text and premium 80 lb uncoated text.

Pantone prints all of their publications in their own facility under a stringent ISO-certified quality management process to ensure the highest quality, which also replicates the real world printing conditions found in today's successful print shops.

## COLOR LAYOUT

The original PANTONE FORMULA GUIDE is organized around "centerline colors" – a series of PANTONE Basic Colors and mixtures of PANTONE Basic Colors are printed as the center color bar of each page. These centerline colors are let down with increasing amounts of transparent white toward the top of the page and with increasing amounts of black toward the bottom of the page, as shown in Figure 1a.

PANTONE Goe extends this concept to accommodate an even larger range of colors and is organized around full strength colors created by mixing no more than two of the nine chromatic PANTONE Mixing Bases. This allows the highest chroma values for each combination of two Mixing Bases. Full strength colors occupy the bottom color bar of the first page within each series. Each new combination of full strength colors forms a color "family" starting at the bottom of the first page with increasing amounts of PANTONE Clear going up the page. Each color family may extend over several pages, where the black component increases from page to page as shown in Figure 1b.

The result is a chromatic-like ordering of colors from page to page. The colors are spaced to give comprehensive coverage of the gamut achievable by spot color printing with transparent inks. Finding where a given color belongs in this arrangement is straightforward, and the new color naming system leads the user directly to the page in the new GoeGuide on which any color is found.

## NAMING THE NEW COLORS

As Pantone intends for the PANTONE Goe System to complement the existing PANTONE MATCHING SYSTEM, a different naming system was developed to avoid confusion and reflect the color layout. The Goe naming convention is based on the 165 full strength colors and the families of colors derived from them. Individual color names reflect this approach using a three-part hyphenated numbering system, plus the substrate identifier where "C" refers to "Coated" stock, and "U" to "Uncoated" stock.

Using color name “PANTONE 16-4-1 C” for example:

- The number “16” tells us the color resides in the sixteenth color family and stems from the full strength color in that series.
- The number “4” indicates the page number within that series. A series may contain as little as one page, or as many as five.
- The number “1” indicates where the color appears on the page.



Figure 1a

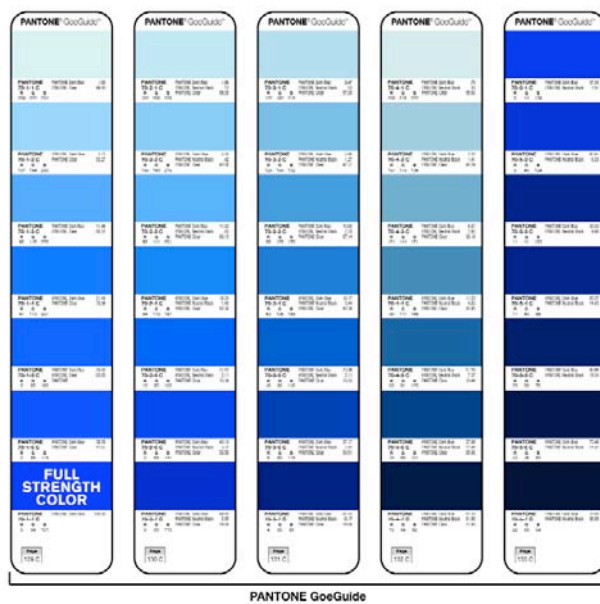


Figure 1b

## APPLICATION INTEGRATION

To provide the highest levels of display and output color quality, each Goe Color brings with it full numerical and digital specifications. Through its work with the leading software, workflow, RIP, proofing and digital printing partners, Pantone Licensee Partners are enabled with Goe data sets. This allows for more reliable and consistent handling of Goe Colors within applications and throughout workflow.

Pantone has been working with the major design, workflow and RIP hardware and software developers to provide integration of the PANTONE Goe Library into future software updates. For a listing of all current PANTONE Digital Licensees, go to [www.pantone.com](http://www.pantone.com). To quickly address seamless color specification within Adobe® Creative Suite® Applications., Pantone created Goe digital color libraries that ship with Goe products or may be downloaded free at [pantone.com/goe](http://pantone.com/goe).

The new System is digitally friendly and has been engineered to take full advantage of the color gamut of many of the digital color output devices, from color laser, to wide format inkjet to digital presses.

## EXPANDING COLOR HORIZONS

PANTONE Goe integrates with the original PANTONE MATCHING SYSTEM with which designers are intimately familiar. Some of the colors that reside in the PANTONE MATCHING SYSTEM (approximately 40%) are also in the new system but named with a Goe number. Understanding that this larger grouping of colors has more potential for cross media work, Pantone has provided sRGB values for each color within the GoeGuide.

Once a color is specified within a design software program, it must pass through a RIP (Raster Image Processor), or driver, to be output for printing. Although the new System is designed specifically for spot color output, Pantone recognizes that users will frequently use “process” conversions to “match” the spot colors. In cases where spot colors are used, proofing devices generally must simulate those colors using the capabilities of inkjet or toner-based printing systems that have color gamuts that differ from traditional printing presses. In other cases, the final output may be a digital printing device.

To address these needs of color-managed workflows, PANTONE Goe uses industry standard L\*a\*b\* color data. This allows software and output devices to use sophisticated digital color tools including ICC profiles and color-managed workflows to get the best possible simulation of a spot color.

## GOE PRODUCTS

### PANTONE GoeGuide

The GoeGuide is the primary vehicle for selecting and communicating the 2,058 Goe Colors. Seven colors are printed per page, each identified by unique number along with ink mixing formula and sRGB values. Presented in fan format, the guide is made up of 294 sequentially numbered pages and printed on #1 grade 100 lb coated offset text paper or premium 80 lb uncoated text. Two additional pages display the ten Goe Ink Mixing Bases used to create the colors.

### PANTONE GoeSticks

All 2,058 Goe Colors are available in chip format. The chips provide a simple and professional looking method of communicating color choices between clients, designers and printers. Six chips are provided per color and, as their name implies, have an adhesive backing that simplifies the process of attaching chips where desired. Individual replacement pages are available to replenish colors as chips are consumed.

## PANTONE GoeBridge

Critical to every designer is the need to understand how solid colors will change in appearance when printed in CMYK. And the PANTONE GoeBridge guide does precisely that for Goe Colors. With side-by-side previews, users can compare the Goe Color printed as a solid color on the left to its four-color process equivalent printed to its right. With GoeBridge, designers know what to expect before printing and last minute unexpected surprises are eliminated.

Understand visually which solid colors can be successfully matched in CMYK

Specify Goe Colors as solid or process colors

Use the closest process match with CMYK tint percentages

Faithfully reproduce Goe Colors on screen and on the Web

PANTONE Goe <sup>®</sup> PANTONE MATCHING SYSTEM <sup>®</sup>		
Color System Comparison		
Feature	PANTONE Goe	PANTONE MATCHING
<b>Colors</b>		
Solid	2,058	1,086
Metallic	No	14
Fluorescent	No	14
<b>Color Data</b>		
Ink Mixing Formula	Yes	Yes
sRGB Values	Yes	Icons Only
<b>Color Arrangement</b>	Chromatic	Partial Chromatic
<b>Formats</b>		
Fan Guide	Yes	Yes
Chips Books	Yes	Yes
Adhesive Chips	Yes	No
Palette Playground	Yes	No
Palette Cards	Yes	No
<b>Paper Stock/Availability</b>		
Coated	• #1 Grade 100 lb Offset Text	• #1 Grade 80 lb Gloss Coated Cover
Uncoated	• Premium Grade 80 Uncoated Text	• Premium Grade 90 lb Smooth Offset Text
Matte	• No	• #1 Grade 100 lb Matte Text
<b>CMYK Conversion Guide</b>	Yes	Yes
<b>Ink Mixing Bases</b>	10 (six the same as PANTONE MATCHING)	14
<b>Ink Mixing</b>	Maximum two chromatic bases used	Some colors utilize three chromatic bases
<b>Ink Film</b>	Uniform	Not consistent
<b>Coatings Receptivity</b>	Good	Some Colors Problematic
<b>Digital Support</b>	Yes	Yes
<b>Ink Supplier Support</b>	Yes	Yes
<b>Awareness</b>	Acceptance Growing	Used Worldwide

## PRODUCT PRICING

### GoeGuide, GoeBridge



GoeBridge coated GSG4001 \$99.00 U.S. Intro Price  
 GoeGuide coated GSGS001 \$99.00 U.S.  
 GoeGuide uncoated GSGS002 \$99.00 U.S.

### GoeSticks



GoeSticks coated  
 GSBS001 \$339.00 U.S.  
 GoeSticks uncoated  
 GSBS002 \$339.00 U.S.

### Goe System



Goe System coated GSPS001 \$439.00 U.S.  
 Goe System uncoated GSPS002 \$439.00 U.S.

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