

KODAK GO Banner / DUPONT TYVEK Material / 9 mil

Formerly ENCAD GO Tyvek

GENERAL DESCRIPTION

For durable, wide-format banners, streamers and signs

- Constructed of versatile, high tear resistance DUPONT TYVEK Material for extreme durability
- Flexible substrate that is easily grommited and sewn for flexible banners
- Bold, eye-catching colors with dyes and pigments for photo-realistic image quality

COMPATIBILITY

When used with the following printers and inks, KODAK GO Banner / DUPONT TYVEK / 9 mil is recommended for all applications. Recommendations will provide optimal output when using printing paths commonly associated with each printer. These settings are intended as starting points—other combinations of settings may also provide good results. See "Printing Notes" for more information. "Yes" in the Laminate Recommendation column indicates that this media is likely to have good adhesion with laminates in that class.

For compatibility information for all KODAK Wide-Format Inkjet Media, refer to the Inkjet Media Compatibility Chart at www.encad.com.

Manufacturer	Model	Ink Compatibility		Laminate Recommendation (See Finishing Section)			
		Ink	Print Driver Media Setting	Heat Activated Thermal 210-240°F (99-116°C)	Heat Activated Low Temperature 185-195°F (85-91°C)	Heat Assisted 185-195°F (85-91°C)	Pressure Sensitive Ambient to 120°F (49°C)
KODAK PROFESSIONAL	3038/3043/3062	Dye‡, Pigment	See Printing Notes	No	No	No	Yes†
KODAK PROFESSIONAL	4042/4060/ 4742/4760	Pigment	See Printing Notes	No	No	No	Yes†
KODAK PROFESSIONAL	4860	Pigment	See Printing Notes	No	No	No	Yes†
HEWLETT-PACKARD DesignJet	800	Dye	See Printing Notes	No	No	No	Yes†
HEWLETT-PACKARD DesignJet	1050C/1055CM	Dye	See Printing Notes	No	No	No	Yes†
HEWLETT-PACKARD DesignJet	2000/2500/ 2800/3000/ 3500/3800 CP	Dye‡, UV	See Printing Notes	No	No	No	Yes†
HEWLETT-PACKARD DesignJet	5000	Dye‡	See Printing Notes	No	No	No	Yes†
HEWLETT-PACKARD DesignJet	5000	UV	Banner Tyvek	No	No	No	Yes†
ENCAD NovaJet	PRO 36/50	GA, GS, GO+	See Printing Notes	No	No	No	Yes†
ENCAD NovaJet	PROe	GA, GS, GX‡, GO+	See Printing Notes	No	No	No	Yes†
ENCAD NovaJet	500	GA, GS, GX‡, GO+	See Printing Notes	No	No	No	Yes†

Continued Next Page

Manufacturer	Model	Ink Compatibility		Laminate Recommendation (See Finishing Section)			
		Ink	Print Driver Media Setting	Heat Activated Thermal 210-240°F (99-116°C)	Heat Activated Low Temperature 185-195°F (85-91°C)	Heat Assisted 185-195°F (85-91°C)	Pressure Sensitive Ambient to 120°F (49°C)
ENCAD NovaJet	600/700 series	GS+, GX+, GO+	See Printing Notes	No	No	No	Yes†
ENCAD NovaJet	850	GS+, GX+, GO+	See Printing Notes	No	No	No	Yes†
ENCAD NovaJet	1000i	Qi Dye	See Printing Notes; Printer Heater Setting: 2	Yes	Yes	Yes	Yes
ENCAD NovaJet	1000i	Qi Pigment	See Printing Notes; Printer Heater Setting: 2	Yes	Yes	Yes	Yes
COLORSPAN DisplayMaker	Hi-Res 8, Esprit/ Series XII	EC‡, PC*	See Printing Notes	No	No	No	Yes†
MUTOH Falcon	RJ-4100 RJ-6100	Dye‡, Pigment	See Printing Notes	No	No	No	Yes†
ROLAND Hi-Fi Jet	Hi-Fi Jet FJ-50/ FJ-40, Hi-Fi Jet Pro FJ-400/ FJ-500/FJ-600	Dye‡, Pigment	See Printing Notes	No	No	No	Yes†
EPSON Stylus Pro	7000/9000	Dye‡	See Printing Notes	No	No	No	Yes†
EPSON Stylus Pro	7600/9600/ 10000/10600	Photographic Dye‡	Presentation Matte Paper	No	No	No	Yes†
EPSON Stylus Pro	7500/9500	Pigment	See Printing Notes	No	No	No	Yes†
EPSON Stylus Pro	10000/10600	Archival Pigment	See Printing Notes	No	No	No	Yes†
EPSON Stylus Pro	7600/9600	Ultra Chrome Pigment	Tyvek Brillion	No	No	No	Yes†
	10600		Enhanced Synthetic Paper or Double Weight Matte Paper				

* Based on our testing experience and knowledge of these Printer / Ink combinations, we expect that this media is compatible, although it has not been extensively tested.

† Laminates with vinyl film type work best.

‡ For optimum durability, laminate soon after printing (within 4 hours).

Note: GO Banner is not recommended for use with "lightfast" dye inks unlaminated due to premature fading (which is caused by oxidation). If prints are laminated within 4 hours of printing to seal the image from exposure to air, the print lifetime can be extended—depending on the type of overlamine. "Lightfast" inks include: Encad GX, Ilford Archiva, ColorSpan EnduraChrome, Hewlett-Packard dyes, and KODAK Lightfast Plus inks.

PRINTING NOTES

The Print driver media settings recommended in the Compatibility section are intended to provide usable results with available media profiles found in the printer manufacturer's provided drivers and RIPs. These recommendations will provide proper ink laydowns with no pooling or bleeding, and color which will be acceptable for many applications. It is suggested that tests be run using these recommendations and color corrections be made to meet user expectations.

In cases where no recommendation is made, choose the media setting closest to the KODAK Wide-Format Inkjet Media you are using. For example, if you are printing on KODAK Premium Photographic Glossy Paper / 180g, choose a setting in your driver or RIP which is intended for another glossy photo paper. This should give you a print which requires little or no adjustment to get usable results.

RIPs and Profiles for Encad and Other Printers

For more exacting color, several third party RIPs (Raster Image Processors) are available with profiles supporting Kodak media for Encad, Kodak and other printers. For more information visit Encad's website at <http://www.encad.com/Support/RIP-Support/index.asp>

Following is a list of software companies that provide RIPs for the Encad product line. To obtain profiles that are not available for download directly from Encad, as well as complete product descriptions and support, please visit the RIP company's website.

Encad	www.encad.com/Support/RIP-Support/index.asp
Colorgate Photo RIP	www.colorgate.com/home_e/products_e.html
Best GmbH	www.bestcolor.com/bcint/index.htm
Scanvec Amiable	www.scanvecamiable.com
Onyx Graphics	www.onyxgfx.com
AIT International	www.applied-image.com/Shiraz-RIP.htm
Image Technologies	www.imagetechdev.com
Global Graphics	www.globalgraphics.com
Colorburst Systems	www.compatsys.com
Wasatch Computer Technology, Inc.	www.wasatchinc.com
CADlink Technology	www.cadlink.com
JET RIP	www.jangeun.co.kr

Custom Profiles

While the above printing recommendations and available profiles from Encad will provide adequate results for many wide-format inkjet applications, there are applications, such as inkjet proofing, which demand more exacting color requirements. It is suggested that for these applications, custom profiles be built for given ink/media/printer combinations. Many color management and profile building software applications are available which allow the user to manage color to meet their needs. Also, many RIPs will provide color profiling options which allow the user to control the color of their output. Please contact your dealer or Encad technical support for help determining the best solution for your application.

HANDLING

All inkjet media must be handled with care before and after printing to prevent damage to the ink receiving layer and printed images. Use the following guidelines, your experience, and common sense for the proper care of your media.

- Store unused media in its original packaging, using the core-plugs and plastic sleeves.
- Allow media to acclimate to your environmental conditions for at least 24 hours before use.
- Kodak Inkjet media is rolled printable side out. Avoid touching the printable side by handling by the edges of the roll.
- Wear cotton gloves when handling media to avoid scratches, abrasions and fingerprints from moisture and oils on your hands.
- Do not allow the media to come into contact with moisture. Moisture will damage many types of inkjet medias before and after printing.
- Avoid handling, trimming, laminating or other finishing until prints are completely dry. Dry times will vary based on media type, ink type and environmental conditions.
- Do not fold, bend or crease media or damage may occur to the ink receiving layer.
- Do not allow the surface of the media to come into contact with itself or another inkjet media.
- Use media only in recommended operating conditions—see "Physical Characteristics" section.

Curl

Most types of roll-based inkjet media will exhibit some amount of curl, either toward the base side or toward the print side. This will vary based on media type and environmental conditions. Some media will curl more in low humidity environments and others in high humidity environments. Also, media may curl more towards the core or end of the roll due to "roll memory."

Although curl is mainly an issue when printing, it can also have an impact on laminating and other finishing procedures. Follow these guidelines, and use your experience and common sense to avoid issues caused by curl.

When printing:

- Advance media several inches past the print platen before starting a print job.
- Add weights or clips to the leading edge of the media.
- Attach media to the printer's take-up spool before starting printing.
- Adjust vacuum settings accordingly on printers equipped with variable media vacuum settings.
- Adjust heater and dryer settings on equipped printers to obtain optimum conditions to ensure flat media. See printer owners' manual for their recommendations.

During finishing:

- Reverse wind media, when completely dry, to counteract roll memory.
- Do not allow media to remain rolled for extended periods of time.
- Rough cut prints and lay them flat before laminating.

FINISHING

Detailed information and tips can be found in Kodak publication E-2600, *Laminating, Mounting, and Finishing KODAK Wide-Format Inkjet Media*.

This material can be finished to create pockets for rope or hanging rods and for hemming. High tack banner tape can be used for pockets and hems. Try to use rolled or low-pressure folds when creating pockets and hems, as heavy creasing can crack and flake the inkjet coating. This material can be sewed, but sewing process can scratch or cause coating flaking. If sewing it is recommended that banner be stitched hem side up so that sewing machine foot comes in contact with only the backside of the banner. A double-stitched hem with a maximum of five stitches per inch is recommended.

Grommets can be installed through single hems, or in corners where hems overlap and four layers of material are present. Use banner tape for extra reinforcement where grommets are placed if hems or pockets are not used.

Lamination

Please refer to lamination chart in compatibility sections above for specific printer/ink/laminate recommendations.

Lamination Definitions

Heat Activated Thermal, 210-240°F (99-116°C)*	Polyester laminates applied with hot roll laminators at 210-240°F.
Heat Activated Low Temperature, 185-195°F (85-91°C)*	Polyester laminates applied with hot roll laminators at 185-195°F.
Heat Assisted, 185-195°F (85-91°C)	Polyester or vinyl laminates with pressure sensitive adhesives; specially formulated for inkjet prints, and applied with hot roll laminators at 185-195°F.
Pressure Sensitive, Ambient to 120°F (49°C)	Polyester or vinyl laminates with pressure sensitive adhesives on a release liner, applied at ambient conditions or at low temperature, 100-120°F.

* For both Heat Activated Thermal and Low Temperature, use a laminate with a total thickness (polyester and adhesive) of 3 mils or less on the face side. Thicker laminates may be applied to the back of the print for increased total thickness.

It is important that your print be dry before laminating. For best results, use inkjet-specific laminate products and follow laminate manufacturer's instructions as a starting point. Since lamination performance varies as a function of materials, technique and environmental conditions, it is important to run tests to determine the best methods for your setup. Cleanliness of prints and work area is critical to avoid defects in lamination.

For increased durability, choose a laminate with UV protection and encapsulate with a 1/4-1/2" (6.5-13 mm) seal around the print edges to prevent moisture and other airborne pollutants from reaching the image.

PERFORMANCE GUARANTEE

Indoor Applications (Fluorescent Display)

Encad will guarantee prints from compatible systems against noticeable fading, cracking, yellowing, and bleeding when the print is viewed from its intended viewing distance.

The Indoor Performance Guarantee durations will vary based on the media/printer/ink system. The stated durations assume the media is displayed indoors under fluorescent light (average intensity 450-lux, 12 hours/day), and/or with indirect sunlight exposure (at least 6 feet from a window, with no direct sunlight). The guarantee covers both laminated or unlaminated prints as noted in the table below. The unlaminated guarantee assumes the media will be displayed in a typical office environment and will not be exposed to a high level of pollutants (above a typical ozone level for an office environment).

Terms, conditions and additional information about the Performance Guarantee can be found at www.encad.com.

Manufacturer	Model	Ink	Durability
KODAK PROFESSIONAL	3043/3062	6 Color Dye	6 months laminated
		6 Color Pigment	2 years
HEWLETT-PACKARD DesignJet	5000 Series	6 Color Dye	6 months laminated
		6 Color UV	1 year
	2xxx/3xxx	4 Color Dye	6 months laminated
		4 Color UV	1 year
ENCAD NovaJet	800/700/600/500 Series	4/8 Color GS+	1 month
		4/8 Color GX	6 months laminated
		4/6/8 Color GO+	2 years
	1000i	Qi Dye	1 month unlaminated 2 years laminated
		6 Color Qi Pigment	1 year
EPSON Stylus Pro	7600/9600/10000/10600	6 Color Photographic Dye	6 months laminated
	10000/10600	6 Color Archival Pigment	1 year
	7000/9000	6 Color Dye	6 months laminated
	9500	6 Color Pigment	1 year
	10000/10600	7 Color Archival Pigment	1 year

Outdoor Applications

Outdoor exposure, including exposure to ultraviolet radiation, moisture, oxidation, and chemical pollutants all influence the final outdoor longevity of a graphic image. Encad guarantees that the effects of those exposures will not affect the quality and suitability of the graphic image print, based on accepted industry test standards, for advertising purposes and other customary outdoor display uses. Specifically, Encad guarantees prints from the systems below against excessive fading, peeling, cracking, yellowing, bleeding, and running for the periods stated below.

Terms, conditions and additional information about the Performance Guarantee can be found at www.encad.com.

Manufacturer	Model	Ink	Durability
KODAK PROFESSIONAL	3043/3062	6 Color Pigment	1 month
HEWLETT-PACKARD DesignJet	5000 Series	6 Color UV	3 months
	2xxx/3xxx	4 Color UV	3 months
ENCAD NovaJet	800/700/600/500 Series	4 Color GO+	4 months
		6 Color GO+	4 months
		8 Color GO+	2 months
	1000i	4 Color Qi Pigment	3 months
		6 Color Qi Pigment	3 months
EPSON Stylus Pro	10000/10600	6 Color Archival Pigment	1 month
	9500	6 Color Pigment	1 month
	7600/9600/10600	6 Color Ultra Chrome Pigment	1 month

KODAK GO Banner / DUPONT TYVEK Material / 9 mil

Additional Durability Information

The following table can be used as a guide for printers and inks not included in the Performance Guarantee.

Durability Guidelines for Printers Not Included in Performance Guarantee

If Using	Expect Durability Similar To:
Roland Pye	Epson 9000 Dye
Roland Pigment	Epson 9500 Pigment
Mutoh Pye	Epson 9000 Dye
Mutoh Pigment	Epson 9500 Pigment

ORDERING INFORMATION

KODAK GO Banner / DUPONT TYVEK Material / 9 mil

Roll Length	Roll Width / Order No.			
	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
50 ft (12.2 m)	209458	209680	209459	209686
16.4 ft (5 m) (sample)	215865-00	NA	NA	NA

NA = Not available

PHYSICAL CHARACTERISTICS

Physical Characteristics	Value	Test Method Reference
Caliper	9 mil (229 μ m)	ISO 534
Opacity	93	Tappi T 524
CIE Whiteness	129	Tappi T 524
Weight	145 g/sm	ISO 536
Brightness	107	Tappi T 524
60-degree Gloss	<5	ISO 7668
L*(D65/10 uvi/BBW)	99	Tappi T 524
Tensile Strength (MD/CD*)	8670 / 9590 psi	ASTM D882
Ultimate Elongation (MD/CD*)	21 / 26%	ASTM D882
Initial Tear Resistance (MD/CD*)	1080 / 840 lbs/in.	ASTM D1004
Tear Propagation (MD/CD*)	103 / 105 lbs/in.	ASTM D1938
Flame Spread Classification	Class A	ASTM E84
Operating Conditions	59-86°F (15-30°C), 20-70% RH (non-condensing)	
Recommended Storage Conditions	68°F (20°C), 50% RH	

If you have questions or need assistance, visit Encad's website at www.encad.com or in the U.S. contact Encad Technical Support at 1-877-362-2387.

The contents of this publication are subject to change without notice.

ENCAD, Inc.
A Kodak Company