



Commercial Substrate Evaluation Report



Supplier Information	
Supplier Name	Neenah Paper
Supplier Address	3460 Preston Ridge Rd., Suite 600, Alpharetta, GA, 30005
Supplier Country	USA

Product Information	
Product Name	Environment Digital Cover, Grocer Kraft, Raw Digital
Product Category	Paper
Grammage (gsm) / Basis weight (#)	270 gsm/100#
Thickness (microns/caliper)	17 mils

Certification Number	RI5500-14-3338
Certification Center	RIT
Date of Evaluation	01/30/2014
Evaluated on	HP 5500
Certified for	5500, 5600 multi-shot, 7000, 7500 & 7600
Evaluation Process	Full

Evaluation	Measurement	Result	Grade (stars)	Comments
Runability			★★★	
Simplex	Number of Jams	0	★★★	
Duplex	Number of Jams	0		

Ink Adhesion / Fixing			★★★	
Peeling	100% K in 4 color mode, % in remaining	100%	★★★	
Flaking	<1mm, % Coverage	400%		
Photo Peeling	290K in 4 color mode, % in remaining	100%		
Photo Flaking	<1mm, % Coverage	400%		
Photo Recommended	>80% after 10 or 60 min	Yes		
White Ink Recommended	>80% after 10 or 60 min	Yes		

Blanket Compatibility			★★★	
Cleaner Pages	1st clean page after 12K impressions	1	★★★	
Evaluation Result		Pass		

Comment Detail:

The substrate certification procedure incorporates several processes. An initial screening evaluation is followed by a more comprehensive evaluation looking at the performance of the particular substrate within the press. This checks for:

Runability:

The ability of the substrate to run smoothly through the press in various print modes.

Fixing:

Ink-substrate interaction as determined by: 1) The degree of ink adhesion to the substrate for standard and photo-related applications as measured in a tape peel test of the image; and 2) The degree of flaking of the ink layer. The fixing properties are measured through a range of blanket temperatures and pressures.

Blanket Compatibility:

Blanket-substrate interaction as determined by: 1) Ink-transferability, which is the quality of ink transfer from the blanket to the substrate as reflected in highlight dots, thin lines, heavy images and image edge integrity; 2) 'Blanket Memory' effects, reflected in gloss or density differences between solids and background areas of the previously printed image; and 3) Number of cleaner pages, in which blankets are routinely maintained by performing a self cleaning procedure ("cleaner pages") used to refresh the blanket's release layer.

Photo and White Ink Applications:

Use of robust media products is strongly recommended when printing photo-related and/or white ink applications and/or Light Cyan and Light Magenta due to additional ink coverage demands of these applications. This media has been tested and approved to perform well with higher levels of ink coverage, and is therefore recommended for photo-related and/or white ink type applications. However, it is strongly recommended that user acceptance ultimately be evaluated per individual application and finishing requirements, etc. The test results are provided as a guide; assess actual performance to determine suitability for individual use.

Star Rating

★★★ Best performing substrate: fewer print cleaners needed; no blanket memories at least up to 12K impressions.

★★ Recommended substrate: some print cleaners may be needed; slight memories may be seen up to 12K impression

★ Good substrate: print cleaners generally required; some memories may be seen by 12K impressions.

		★★★	★★	★
	Measurement	Best-performing substrate	Recommended substrate	Good substrate
Transport	Runnability	No jam or minor issues	1 jam or minor issues	1 jam or minor issues
Fixing	Peeling: 100% K,	>90%	>80%	>80% at one hour
	Flaking guillotine, 5 minutes	< 1 mm at 250% K for coated paper, < 1 mm at 300% K for uncoated paper	<1 mm at 250% K	<1 mm at 200% K
	Photo peeling: 290% K, 10 or 60 minutes	>80% after 10 or 60 min		N/A
	Photo Flaking: guillotine, 5 minutes	<1mm at 350% K		N/A
Blanket Compatibility	Cleaner pages OK after 12 K	2nd cleaner page clean	4th cleaner page clean	6th cleaner page clean

This substrate is certified for the next two years from the date of evaluation, provided there is no change to the paper properties or production processes. At the end of two years from the original evaluation date, if there have been no changes in paper properties or production processes, the certification can be extended for another two years. After four years from the original certification date, a new certification is required.



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