International Paper Roll and Package Labels

Idealliance Standard 132-1997

Copyright

Copyright © 2017 Idealliance. No part of this manual may be reproduced in any form without the prior written permissions of Idealliance.

Table of Contents

Background :

The Graphic Communication Association (GCA) became Idealliance in 2001 to better serve all segments of the graphic and visual communications value chain. Idealliance is a not-for-profit industry association with a history of innovation and transformation going back to 1896 with particular emphasis on supply chain best practices and specifications in color management, digital content, forest and paper products, production workflow, and mail. This updated copy of the International Paper and Package Labels standard serves as a snapshot in time of a widely used specifications for roll and sheet paper shipping and receiving transaction sets, along with data segments, data elements and codes for paper handling.

Dedication and Acknowledgments

Dedication

The Joint Roll Identification and Label Committee dedicates this specification to the late Michael P. D'Alonzo of S.D. Warren Company, the group's first chair. Mike's leadership showed the industry that people of good will can work together to solve problems that cut across traditional supplier-customer lines, by keeping everyone focused on the larger goal and by adding his own brands of humor and persuasion. Mike died in November 1995, about a year after he left the group because of failing health. We hope this document is a fitting legacy to Mike's initiative, leadership, and memory.

Acknowledgments

The Paper Roll and Package Labeling Specifications resulted from a joint paper-printing-publishing working group, chaired by Keith Williams of Champion International, after the retirement of Mike D'Alonzo, and later by Mark Johnson of Brown Printing. This working group had the backing of several industry associations representing a range of industry viewpoints. We are indebted to the leadership of Keith Williams and Mark Johnson, and participants in the several working group meetings that developed this specification (see below). We want to give a special thanks to Chuck Siftar of Marprint and Paul Lotz of Lotz Industrial Printers for preparing sample roll labels that helped considerably in the development of this specification.

Rick Agar
Lake Superior Paper Industries

Ruth Armstrong
Quebecor Printing

D. J. Bagozzi
QUNO Corp.

Jean Bigelow
James McLaren Industries

Ruth Felland Bohner
Newspaper Association of America

Dick Bowden
Champion International

John E. Brady
Sheridan Press Inc

Grant Brown
SD Warren Co

Ralph Chetcuti
New York Times

Steve Coulter
Quad/Graphics

Dan Curtin
Repap Sales

Don Den Uyl
Owl Associates

Tom Dickens
Crown Vantage Corp

Larry D. Falstad
Consolidated Papers Inc

David H. Gagnon
SD Warren Co.

Gerald Galewski
Perry Graphic Communications

Stuart Gresswell
Boise Cascade

Ann T. Hatch
Perry Graphic Communications

Don Hildebrand
Via Tech Systems

Robert Hough
Boise Cascade

Scott Huhtala
Blandin Paper Company

Al Ivans
Verso Corp.

John Kalkowski
Stone-Consolidated

Jeff Kenworthy
Champion International

Daniel King
Madison Paper Industries

Paul B. Lotz
Lotz Industrial Printers

Gary Lyons
Lyons Consulting

Dick Maness
New York Times

John MacNamara
James Maclaren Industries

Mike McLaughlin
Crown Vantage Corp

Frank Montague
RR Donnelley & Sons Co

Larry Neidermann
Lake Superior Paper Industries

Matthew Nightingale
Champion International Corp

Bill Orndorff
Judd's Inc.

Tom Pankow
Meredith Corp

Rex Potts
Washington Post

Tony Riachi
Champion International Corp

Steve Rigdon
Blandin Sales Company

Karen Rosenberg
Time Inc

Terry Schager
Bowater Inc

Chuck Siftar
Marprint

Mark Sloan
Westvaco Corp

Mary Speed
Champion International

John Townsend
Champion International

Carolyn Warren
Time Inc.

Rupert White
Madison Paper Industries.

Cliff Wilson
HK Systems

Jordan Gorski
Idealliance (staff support)

Alan Kotok
Graphic Communications Association (staff support)

Linda Larson
Graphic Communications Association (staff support)

International Participants

Ruth Pelland Bohner
Newspaper Association of America

Tom Croteau
Newspaper Association of America

Boris Fuchs
INCA-FIEJ Research Association

Alan Kotok
Graphic Communications Association

Bénédict Lamy
INCA-FIEJ Research Association

Eric Wolferman
Newspaper Association of America

Robert Wood
Canadian Pulp and Paper Association

International Paper Roll and Package Label Specifications

Introduction

In late 1993, representatives from the paper, printing, and publishing industries agreed to form a working group to help solve chronic problems on the identification and labeling of roll paper used in printing and publishing. The group identified several key objectives, particularly development of uniform specifications for the identification number assigned to rolls and the labels applied to individual rolls and multi-roll packages.

By late 1994, the group agreed to a roll number specification for mills in the United States and Canada called the North American Roll Identifier. After completing work on the roll identifier,. the group tackled roll and package labels. These guidelines represent the work on labels for rolls and packages of printing and writing papers, including newsprint.

The working group represented organizations with long-standing interests in this issue:

American Forest & Paper Association (AF&PA)
Canadian Pulp and Paper Association (CPPA)
Graphic Communications Association (GCA)
National Paper Trade Association (NPTA)
Newspaper Association of America (NAA)
Technical Association of the Pulp and Paper Industry (TAPPI)

The late Mike D'Alonzo of S.D. Warren Company chaired the first three meetings of the working group, until his retirement in the Fall of 1994. Keith Williams of Champion International succeeded D'Alonzo as the chair. Mark Johnson of Brown Printing Co. finished chairing the group in 1996. All of these gentlemen deserve the industry's gratitude for their leadership on these issues. Participants in the working group meetings included representatives of paper mills, printing companies, magazine publishers, newspaper publishers, and merchants. GCA provided staff and technical support for the working group.

Ruth Felland Bohner of Newspaper Association of America organized a meeting in Geneva during October 1996, of representatives from North American and European paper and publishing industry associations to discuss international roll labeling and identification specifications. As a result of the meeting, the group agreed on a draft roll label specification to recommend to each of the participating organizations. This document reflects the recommendations from that meeting.

We thank Ms. Felland Bohner for her initiative in organizing this meeting. Participants at the session represented the following organizations:
Canadian Pulp and Paper Association (CPPA)
Graphic Communications Association (GCA)
INCA-FIEJ Research Association (IFRA)
Newspaper Association of America (NAA)

A representative of American Forest and Paper Association had planned to attend, but needed to withdraw at the last minute.

Background and Rationale

The working group formed because of slow progress reported in the use of new technology and practices to improve management of paper roll inventories. A 1992 survey of paper customers by GCA and TAPPI indicated the lack of standards in roll identification and labeling as major barriers to implementing these technologies and practices.

The joint industry group had the benefit of other recent work to build on. A TAPPI working group developed a set of roll and package label guidelines in 1993. These guidelines made a significant contribution by identifying key information needed on labels used for roll stock, as well as giving priority to certain kinds of information - in fixed or mandatory fields - over other pieces of variable information needed by individual trading partners. TAPPI's guidelines also pointed out information that mills can pre-print on the labels, such as the logo and unwind direction.

The guidelines, while making significant headway in identifying these pieces of information, left the arrangement of the information on the label up to the mill. The joint industry working group wanted to build more specificity into the guidelines, so customers would have a more uniform and consistent array of this information on labels.

The joint industry working group found further help in meeting this goal in the release of an *American National Standard for Materials Handling - Unit Loads and Transport Packages Bar Code Symbols* (ANSI MHI0.SM-1993). This document provides guidelines to industries designing common label specifications. It specifies the need for customer and supplier blocks of information, and provides models for arranging human-readable and bar coded information on shipping labels. This standard helped address some of the issues facing the working group.

Paper customers increasingly need greater consistency in the labels received on rolls and multiroll packages. As customers move to roll-by-roll management systems that track the delivery, storage, use, and performance of individual rolls, the need for much greater accuracy in capturing roll information also increases.

Roll-by-roll (or unit-based) inventory management systems give paper customers considerably more detailed information on inventories over the traditional lot- or weight-based management methods. Customers can track individual rolls as units from the moment they are shipped, through receiving at plants or warehouses, storage and transfer, and use on the press. Also, systems and specifications such as the P Aper Quality EDI Transaction (PAQET) allow mills to receive roll-by-roll performance data from customers which contribute to a higher quality product over time.

The main responsibility for roll handling falls on the warehouse and press room workers who need to find rolls with specific roll identification numbers or with certain characteristics. A standard roll numbering scheme - i.e. the North American Roll Identifier - lets these workers find rolls meeting certain specific manufacturing conditions, such as mill, machine, date of manufacture, or log position.

A common labeling specification likewise has several direct benefits for companies handling rolls. The standard label format makes it much easier to find and scan the bar coded roll identifiers on the labels, as well as pick out the key information in human-readable form needed for more accurate roll selection. The common format removes much of the guesswork for warehouse and press room staff, minimizing picking errors, and speeding delivery of the paper to press. With increasing use of more complex storage and distribution schemes, such as third party warehouses, just-in-time deliveries, and the use of brokers or merchants in the chain, the chance for expensive and time-consuming errors increases. In this environment, the need also increases for conventions that simplify the process, such as a common roll label format (and a uniform roll identifier).

The joint industry working group discovered, as the TAPPI group found previously, that mills must respond to a wide range of demands by customers, as well as varying conditions among market segments. These demands and conditions make it important for mills to have systems with the flexibility to respond to customer needs. Any roll label specification needs to balance this need for flexibility with the presentation of a more consistent array of information for paper customers.

Objectives and Assumptions

The joint industry working group expressed a number of objectives and assumptions for roll label specifications that guided its work:

- Design the label for warehouse workers and press operators, those having the most direct contact with roll labels.

- Produce a single label for use with customers that receive EDI transactions, as well as those that do not.

- Include multiple bar codes with the roll identifier, to help improve scanning and provide for a backup bar code in case one gets damaged in transit.

- Have at least one bar code large enough to be scanned by the clamp truck driver without leaving the cab.

- Maximize the distance between roll identifier bar codes, and other bar codes on the label requested by trading partners, to avoid problems in scanning the bar codes

- Include the option of self-stick peel-off labels needed by many customers.

- Provide symbology, size, and quality specifications for bar codes.

- Put information required by specific suppliers or customers in separate blocks.

- Include both English and metric measurements.

- Leave the definition of any weight measurements used on the label up to the trading partners.

- Include guidance on identifying rolls after the label is removed.

- Recognize that customers may receive individual rolls shipped in multi-roll packages, but they run the rolls and track them individually.

- Recognize that the greater the number of labels needed on rolls or packages, the greater the impact on wrapping line speeds.

- Construct a specification independent of individual labeling technologies but feasible using existing methods and systems

- Provide for evolutionary as opposed to drastic changes in label design and technology, to encourage mills to adapt to the new format.

In June 1996, IFRA conducted an independent survey of requirements of roll labels for newspapers. IFRA's survey found requirements among European newsprint producers similar to those in North America. They requested the following information appear on roll labels:

- Name of paper producer

- Grade and/or quality of product

- Unwind direction

- Roll number (the survey used the term "reel number")

- Roll weight

- Basis weight

- Linear measure

- Diameter

- Identifier bar code (IFRA, CEPI, North American)

- Optional information required by customer, such as number of splices, customer name, and order number

IFRA recommended having only one type of identifier bar code on the label - IFRA, CEPI, North American - to avoid misinterpretations, with the choice determined by the trading partners. IFRA's survey stated the need for at least three peel-off stickers with the roll number bar code. It also noted that mills should use laser or thermal transfer printing technologies to achieve higher print contrast and quality on the labels.
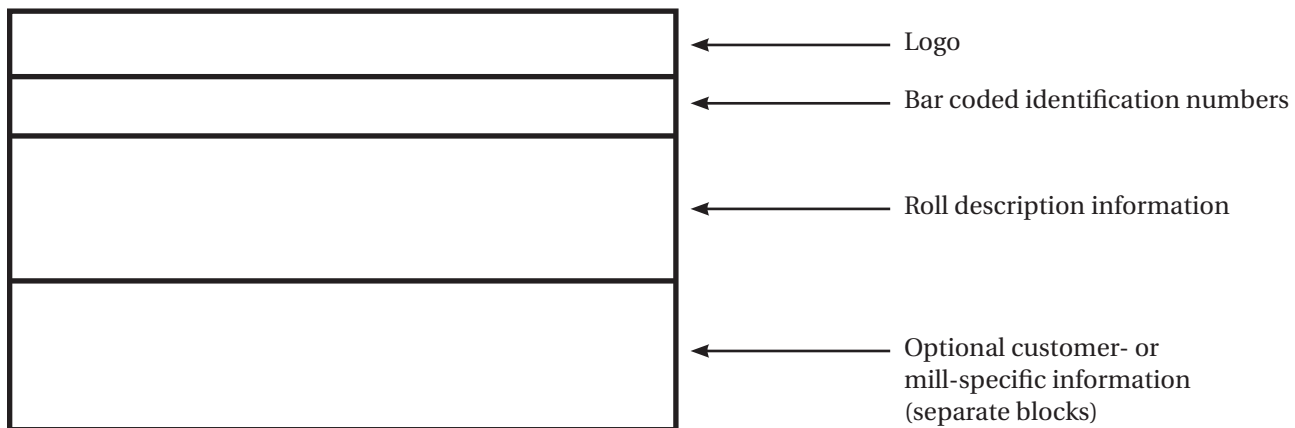
The IFRA survey indicated a need for the label to provide information for transportation companies, such as the gross weight of the roll in bar coded form. To meet these requirements, some of IFRA's respondents found they had to take extraordinary steps, such as printing the roll weight for carriers on a different color label stock, perforated for easy removal by the carrier.

IFRA recommended a label of 380 to 400 mm (14.96 to 15.75 inches) wide and 280 to 300 mm (11.02 to 11.81 inches) high. They also recommended printing the roll identifier bar code over three contiguous peel-off stickers arrayed vertically in one block.

Roll Label Format

The working group identified four sections on the roll label applicable to individual rolls; see Figure 1:

Figure 1: Sections of the roll label

Logo

Bar coded identification numbers

Roll description information

Optional customer- or mill-specific information (separate blocks)

Logo, identifying the company. Many companies pre-print the logo on label stock at the top of the label. It serves primarily marketing purposes. The size of the logo will vary, often depending on the type of label technology used by the company. Dot matrix printers, for example, require 3-4 inches for threading label stock , and this space is used by the logo.

Bar coded roll number. The bar coded representation of the roll number lets the customer capture this critical piece of information in machine readable form. The first people in warehouses or printing plants to encounter the bar codes are the receiving staff, including clamp truck drivers. At least one of the bar codes must be large enough for clamp truck drivers to scan without leaving the cab. Other warehouse or press room staff deal with the bar codes from closer distances and thus do not need as large a bar code, or they may remove the bar codes, applied to peel-off labels, and stick them to reporting forms where they are scanned later on.

Roll description information. These pieces of information, in human-readable form, let the warehouse and production staff identify paper for specific jobs and presses. Because these fields are widely used in printing, they must appear in this block on each roll label.

Optional information. These fields, specified by the supplier or customers, help the parties in the transaction manage their inventories, but will vary from one company to the next. Calling these fields "optional" makes them no less important, however, and the label specification makes provisions for them. These items can be either human readable or bar coded, but should be put in separate customer or supplier blocks. Mills may also use this part of the label to print extra peeloff stickers, if they cannot fit on the same line as the bar coded roll number.

Label Information Blocks and Specifications

Logo
Mills use the logo for marketing purposes, and therefore the design and content of this area are up to the producing company. Many companies use this area to indicate country of origin, either in text or a flag illustration. However, this text or symbol should not substitute for precise information when required by trading partners or authorities, and should go in the optional area on the label.

Grade name. Some companies use the logo area to print the grade name. Adding the grade name becomes important on labels for seconds or job lots, where companies remove the preprinted corporate name from the logo area but leave the machine-printed grade name. While this practice is required in some business arrangements, moving the printed grade name to the logo area does not follow the guidelines of this roll label specification, which requires the grade name printed below the identifier bar codes. See the section on roll description information.

Unwind direction. While not strictly part of the logo, the unwind direction is also preprinted on labels, and may appear at the top or bottom.

Bar coded identification number
The bar coded roll identifier block contains machine readable information scanned by clamp truck drivers that first encounter the roll, as well as press room and office staff who remove peeloff stickers with the bar codes and apply them to tickets and tracking forms for management use. Using at least two bar codes on the line provides a measure of redundancy should one of the bar codes become marred during transit.

Having these bar codes consistently in this position on the label - directly under the logo -identifies them as the roll number. Other bar codes on the label should go in the optional area at the bottom of the label, to avoid confusion with the roll identifier.

Readers should consider the following specifications as a minimum set of conditions, applicable to dot-matrix printers. Later, the document spells out ways of increasing the number of peel-off stickers in this part of the label. Mills may not be able to meet these optional specifications using dot-matrix printers, and should consider printing methods such as laser or thermal transfer that can effectively produce the smaller bar code symbols.

This specification provides for up to six peel-off stickers on a label, and customers and mills will need to agree on their number and placement, based on the options provided. The need for extra bar code stickers should lessen as paper customers install more advanced systems that better integrate EDI data used for inventory control with production and accounting functions. As customers upgrade their management systems, they should reduce their requirements for peel-off stickers to a minimal number, which will promote efficiencies throughout the process.

For customers in the U.S. and Canada, mills should print the North American Roll Identifier on this line. Since mills will migrate to the North American Roll Identifier from the former TAPPI number over a period of time, the presence of the North American Roll Identifier in this block will depend on each mill's implementation of it.

This line will be no less than 1.5 inches (38.10 mm) high. If the mill prints the North American Roll Identifier or former TAPPI numbers, this section should contain no fewer than two bar codes using Code 39 symbology, with the following characteristics:

Bar code 1

- X dimension, minimum size of the narrow element = 0.030 inches (0.76 mm)

- Wide to narrow element ratio = 3

- Quiet zone, non-printed space on either side of the bar code = at least 10 times the X dimension, but no less than 0.5 inches (12.7 mm)

- Bar code height= 1.5 inches (38.1 mm) minimum

Bar code 2

- X dimension, minimum size of the narrow element = 0.015 inches (0.38 mm)

- Wide to narrow element ratio = 3

- Quiet zone, non-printed space on either side of the bar code = at least 10 times the X dimension , but no less than 0.5 inches (12.7 mm). Since the bar codes contain the same information and symbologies, the quiet zones between bar codes 1 and 2 may overlap.

- Bar code height= at least 15 percent of the length, but fitting into the 1.5 inch (38.1 mm) height specified for this block

- If the customer requires peel-off labels, the mill should print bar code 2 over two or three such labels dividing the bar code line horizontally. See Figure 2A for the basic configuration. If customers require more than two or three peel-off bar codes, the mill should print them on opposite sides of the larger bar code, in the optional area of the label, or extend the depth of the second bar code to accommodate up to six peel-off stickers. (see Figures 2B and 2C below).

A human readable representation of the roll number should be printed in a small font that does not interrupt bar code scanning, immediately above or below each bar code. Some customers may require more human-readable information such as vendor name, roll weight, and dimensions on the peel-off stickers. In these instances, mills will need to print the human-readable information around the bar code on the sticker, and fit these stickers in the optional area.

Mills may position bar code 2 on either the right or left of bar code 1, which ever helps balance the packing of label stock and promote more efficient label printing. Where mills need to print extended text in the optional area, they may need to print the peel-off stickers on both sides of bar code 1. In this instance, it may require reducing the size of bar code 1 to fit them in.

For these and all bar codes on the label, symbols should meet the specifications of *the American National Standard for Information Systems - Bar Code Print Quality Guideline* (ANSI X3.182-1990). This guideline covers the optical characteristics of bar code symbols and is available from the American National Standards Institute.

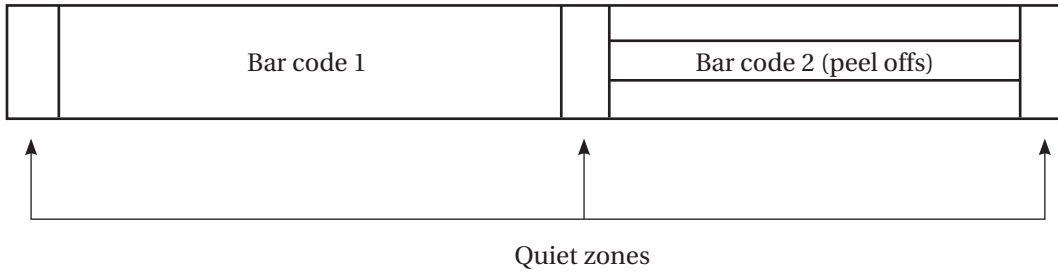*Figure 2A. Bar Coded Identification Numbers Section - Basic Configuration*

| | Bar code 1 | | Bar code 2 (peel offs) | |

Quiet zones

Figure 2B. Coded Identification Numbers Section With Six Peel-Off Stickers

| | Bar code 1 | | Bar code 2 (peel offs) | |

Quiet zones

Figure 2C.

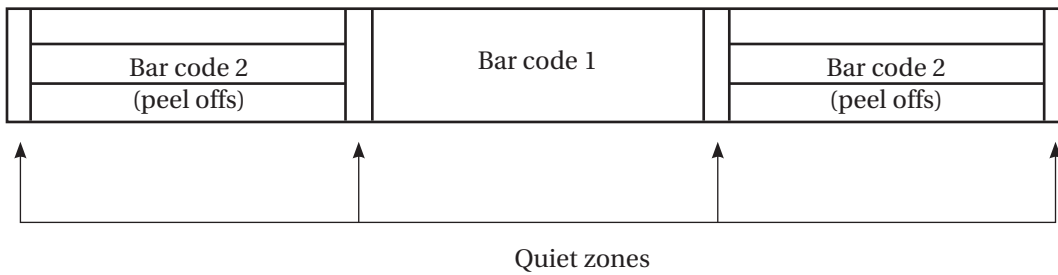| | Bar code 2 (peel offs) | | Bar code 1 | | Bar code 2 (peel offs) | |

Quiet zones
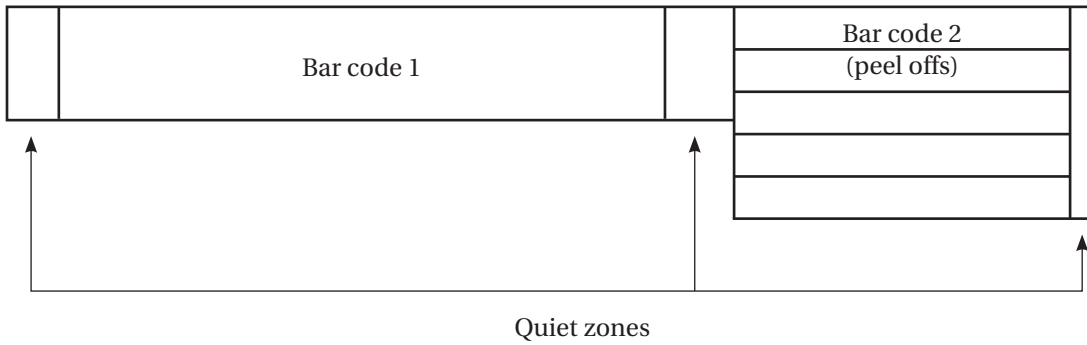
CEPI unit identifier and IFRA bar codes. European customers will likely require bar codes printed according to the Confederation of European Paper Industries (CEPI) or IFRA specifications. The CEPI unit identifier has 16 numeric digits and printed in Code 128-C symbology. IFRA bar codes also use 16 digits and printed in Interleaved 2-of-5 symbology.

If mills need to print CEPI or IFRA bar codes on rolls shipped to Europe, these symbols take no more space than the North American Roll Identifier bar codes in Code 39 symbology, and thus will fit in the same bar code block on the label.

Options for printing peel-off stickers. Newspaper, printers, and warehouses use bar codes printed on peel-off stickers for recording movement or usage of rolls in their organizations. The staff members remove the self-stick bar code from the label, apply it to a form or ticket, and then use a contact wand or scanner to capture the roll number without rekeying.

In this specification, the peel-off stickers provide an additional function. By printing two or more of the stickers adjacent to each other, they serve as an additional long-distance bar code to help improve first-read scannability, and also provide redundancy if the larger bar code gets damaged in transit.

For dot-matrix printers, or where customers require no more than two or three peel-off stickers, the mill should print horizontally-stacked bar code stickers on the same line as the large bar code, as indicated in the specifications above for bar codes 1 and 2. Where the customer requires more than two or three peel-off bar codes, the mill should use one of the following options:

For dot-matrix printers, print the additional peel-off bar codes either on opposites sides of bar code 1 or in the optional area. If printing bar code stickers in the optional area, we recommend printing the stickers on the opposite side of the label as the peel-off bar codes on the first line of the label, to keep the label stock balanced in the feeder boxes.

For laser printers, print a block of six bar code stickers stacked vertically together that will extend into the first line of the roll description section immediately below. Label stock for laser printers feeds horizontally and works better when peel-off stickers are aligned to feed together into the printer. Take care that bar codes in the customer/mill optional area below the peel-off stickers do not come within four-inches (101 mm) of the peel-off stickers, as specified for this part of the label; see page 13.

If the customer requires more human readable information than the roll number only printed on the peel-off stickers, the mill will need to print the stickers in the optional area.

ROLL DESCRIPTION INFORMATION

The roll label will devote three lines to human readable information describing various characteristics of the roll. Where the label presents measurements for this information, print the primary measurement - English or metric - in a large bold type face, and the alternative measurement in a smaller type face either above or below the measure. Except for the grade name, identify each block with a block descriptor, also above or below the information. If the block has measurement information, put the descriptor on the same line as the alternative measure. Figure 3 gives the recommended configuration of the roll description blocks.

Roll description line I: Grade name. Mills will print the grade or product name on the line immediately below the bar coded roll identifier. This line can also have the standard recycled paper (chasing-arrows) symbol, if required. Given that the combination of grade name, shade or color, and recycled symbol can amount to a sizable amount of information, and the presence of extra peel-off stickers from the top line may restrict the space, mills may need to split this line horizontally and present the text in two lines. If the mill needs to use two lines for this information, the first line of text should be no more than half the size of second line.

Roll description line I: Shade or color. For grades where shade or color is not apparent or inferred from the grade name, such as book papers, the first roll description line will also include a shade or color descriptor.

Figure 3. Roll Description Section

	Grade name and shade or color Grade name and shade or color		
Basis weight*	Roll width	Roll diameter	Core diameter/type/ thickness code
North American Roll Identifier, or IFRA/CEPI unit identifier (human readable)		Roll length	Roll weight

* Or caliper, if required for grade description

Roll description line 2: Basis weight. The far left hand block of this line should have the basis weight, given either in English pounds or metric grams per square meter (GSM). The block should have the alternative measure - e.g. metric for U.S. customers - printed in smaller print above or below the primary measure, but on the same line as the block descriptor.

Roll description line 2: Caliper. If caliper is a more meaningful measure than basis weight for this grade, the far left-hand block will present caliper, with the rules of primary and alternative measures applying.

Roll description line 2: Roll width. The second block from the left will have the width of the roll, printed either in inches or centimeters. Use the rules of primary and alternative measures in this block.

Roll description line 2: Roll diameter. The third block from the left will have the roll's diameter, printed either in inches or centimeters. Use the rules of primary and alternative measures in this block.

Roll description line 2: Core diameter/type/thickness: The far right-hand block will have information about the roll core, including a code indicating its material and end-type, as well as its inside diameter and thickness. The block should have the following descriptor: 'core diameter/type/thickness', with data in the block presented in that order, and each of the three elements separated by a front-slash character. Use three positions for inside diameter and thickness measures, with one decimal place assumed for centimeters and two decimal places assumed for inches. Current GCA/AF&PA core codes are given below:

Positions	Description	Data type	Codes/description	
1-3	Inside Diameter	Numeric	Inches or centimeters	
4	Material	Alpha	F	Fiber
			I	Iron
			S	Steel
			A	Aluminum
5	End	Alpha	P	Plain
			N	Notched
			M	Notched, full metal (tip or cap)
			C	Plain full metal (tip or cap)
			H	Notched, half-metal (tip or cap)
			I	Insert or sleeve
			B	Bridge or half-notch
			V	Beveled
			T	Tapered (proposed)
6-8	Thickness	Numeric	Inches or centimeters	

Print only the primary measure for the inside diameter and thickness; you need not print an alternative measure in this block. Assume one decimal place for centimeters and two decimal places for inches.

Roll description line 3: Human readable roll identifier. In the left-hand block of the third roll description line, print the human-readable North American Roll Identifier, or appropriate international roll number.

Roll description line 3: Roll length. The middle block on line 3 will have the length of the roll, either in feet or meters. Mills may present either a measured roll length or computed value. Use the rules of primary and alternative measures in this block.

Roll description line 3: Roll weight. Print the weight of the roll in pounds or kilograms (kg) on the right-hand side of the third line. Trading partners should define the weight according to their sales agreements. Use the rules of primary and alternative measures in this block.

CUSTOMER- OR MILL-SPECIFIC INFORMATION

The label allocates the bottom section for information requested by customers or required by the mill. The information can be printed in either human readable or bar coded form. Because label software sends bar codes to printers as graphic images, they print slower than text. As a result, the more bar codes requested on the label, the greater the impact on wrap line speeds in the mill.

Identify each field of information presented in this block or divide the block, vertically or horizontally, so customers can find the information requested. Figure 4 provides an illustration of one way to array information blocks in this section.

Figure 4. Customer- or Mill-Specific Information Section

Example of optional fields configuration

Product code, human readable	Reserved for mill use		Roll weight bar code
Product code, bar code	Peel-off sticker, roll identifier bar code	Peel-off sticker, roll identifier bar code	

Bar codes. If the mill prints bar codes in this area, the symbols may go anywhere in this section of the label, provided they are no closer than four inches (101 mm) from the roll identifier bar codes, unless in a vertical orientation. Identify all bar codes with small print either inset or adjacent to the bar code's required quiet zones.

Print the bar coded roll weight, if needed on the label, below the human readable roll weight in the roll description block. If the bar code is in a horizontal orientation, it should go no closer than four inches (101 mm) to the roll identifier bar codes. If printed in a vertical orientation, the mill may print the weight bar code closer than four inches from the roll identifier bar code.

A product code can be printed in this optional block. If the label also has the roll weight in bar coded form, the product bar code should go in the lower left-hand corner of the label. Customers using Uniform Code Council (UCC) bar codes may require other symbologies than Code 39 and application identifiers with their bar codes. Consult the *Application Standard for Shipping Container Codes,* available from the UCC for information on these requirements.

As the use of EDI increases in the printing and publishing industries, customers may find less need to use this area of the label. EDI allows for faster and more reliable transfer of data from mill to customer than bar codes and should replace human readable text keyed in on receipt. As customers make more use of EDI, they should review the need for mills to print items in this section of the label.

Numbers of Labels

Each roll should have at least one label per roll. Although more labels on the roll are desirable, particularly to provide a back-up if on label is damaged during shipping, customers should note that the more labels requested, the longer the time needed for wrapping. The position of the label(s) on the roll will be determined by the trading partners.

Labels On Multi-Roll Packages

This part of the specification applies only to grades produced for printing and publications, and with roll widths of at least 16 inches.

Customers with roll-level management systems require labels for individual rolls, including rolls packaged together for shipping. While this form of packaging is efficient for mills, customers may break open-packages soon after receipt, store the interior rolls separately, and use the rolls on different jobs. As with rolls shipped individually, customers need to track the performance of each roll for reports to publishers who furnish the paper as well as back to the mills.

For these reasons, the specification establishes as an objective that mills apply one label on each roll positioned on the exterior of the package as close as possible over each roll. Each roll will have its own unique roll identifier.

This specification also recognizes that, as of the date of this document (1996), technology may not exist to automatically apply multiple labels on packages over the rolls in those packages. As a result, this part of the specification represents a target for development of roll wrapping technology, with implementation encouraged by mills once it becomes available.

Identification of the Unwrapped Roll

Customers running individual rolls will sometimes use only part of the roll and store it for future use. Because customers may not have access to the original labels, rolls should have a means of identifying the rolls after removing the wrapper. For this reason, mills should consider stenciling or ink-jetting the roll number on the roll head near the core. A tag attached to the core, that does not interfere with loading or running on press, is another alternative.

Implementation Guidelines

A more uniform and consistent label for paper rolls will make the label a more useful information medium for customers. For many mills however, meeting all of these important requirements, including application of multiple labels on multi-roll packages, will require an extended period of time, perhaps several years.

The need for an extended migration period is a result of the close connection between labeling systems and other systems in the mill. Many mills have integrated production systems, which use the individual information blocks in their current roll label systems for manufacturing control and other management functions. For these companies, changing the roll label means changing these other programs, and represents a major undertaking, requiring significant reprogramming of these systems with either current or contracted staff.

As recommended in the North American Roll Identifier specification, mills should plan on using scheduled systems upgrades to implement the new label guidelines. Paper companies, like any organizations, will eventually upgrade their systems or wrap lines, either with new equipment or more modem software. Using this opportunity to adopt a new label makes the cost of the change more incremental, and can be built into the overall system upgrade.
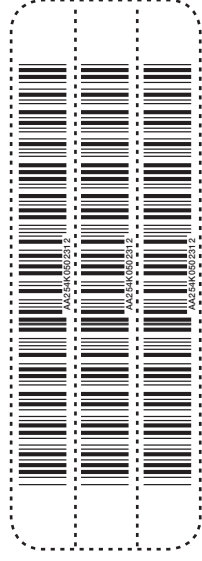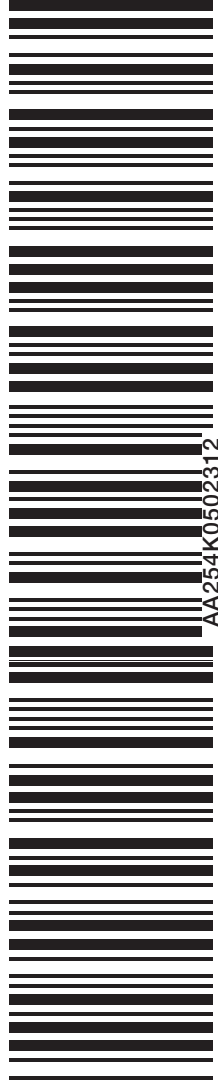
Since customers will receive most of the benefit from the new labels, they have an important part to play in changing to the new specifications. Customers can show their suppliers how the new roll labels encourage better inventory control and detail the bottom-line results. For many customers, the consistent bar code position in the new labels will provide the incentive to start using bar codes at their locations. They should show their suppliers how the roll label makes adopting this technology possible and how they can implement a roll-based inventory system, with all of the advantages spelled out in the Introduction.

This specification, at several points, makes reference to "trading partners" or "trading partnerships" This term has more than rhetorical significance; it implies that paper, printing, and publishing companies are in many ways dependent on each other. They need to consider the longer term health of the parties and not impose unreasonable requirements or conditions for doing business. In that spirit, customers should avoid the temptation of forcing suppliers to immediately adopt these label guidelines, and work with suppliers to develop a mutually-agreeable timetable for their implementation.

References

1. *American National Standard for Information Systems - Bar Code Print Quality Guideline*
   (ANSI X3.182-1990).

2. *American National Standard/or Materials Handling - Unit Loads and Transport Packages - Bar Code Symbols*
   (ANSI MH10.8).

3. *Application Standard/or Shipping Container Codes.* Uniform Code Council. December 1995.

4. Don Den Uyl. *Updated TAPP/ Roll Identifier.* Paper presented at the TAPPI Finishing and Converting Conference.
   October 18, 1995.

5. Don Hildebrand. "TAPPI Roll/Package Labeling Guidelines." *TAPPI Journal,* vol. 77, no. 1. January 1994.

6. Alan Kotok. "How to Manage Paper - And More." *Publishing and Production Executive.* April 1995.

7. *North American Roll Identifier.* Graphic Communications Association, 1995.

8. *Paper Quality EDI Transaction* (PAQET). Graphic Communications Association, 1994.
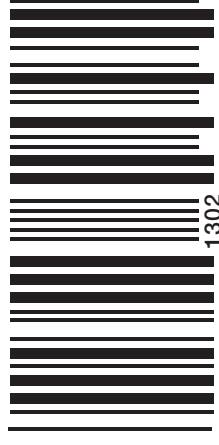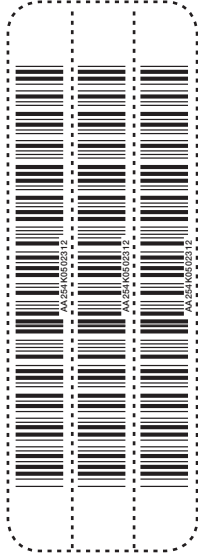
PAPER COMPANY LOGO

AA254K0502312

GRADE NAME AND SHADECOLOR
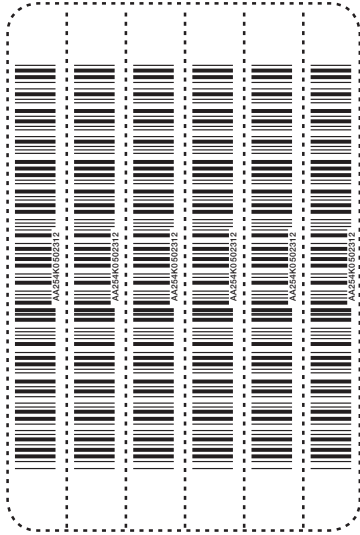
100%
POSTER-CONSUMER FIBER

BASIS WEIGHT (CALIPER)	221 GSM	ROLL WIDTH	60.2 CM	DIAMETER	141 CM	CORE DIAMETER / TYPE / THICKNESS
100 LB		23-13/16 IN		55 1/2 IN		300/FP/100 IN

ROLL LENGTH	7068.5 M	ROLL WEIGHT	2871 KG
21444 FT		1302 LB	

ROLL IDENTIFIER

AA254K0502312

MISCELLANEOUS MILL/CUSTOMER DATA IN THIS AREA

1302

GCA5C.IFD

<UNWIND   UNWIND   <UNWIND   <UNWIND   <UNWIND

END OF 14 7/8" FORM

PAPER COMPANY LOGO

AA254K0502312

♻ 100%
POSTER-CONSUMER FIBER

GRADE NAME AND SHADE/COLOR

BASIS WEIGHT (CALIPER)	221 GSM	ROLL WIDTH	60.2 CM	DIAMETER	141 CM	CORE DIAMETER /	TYPE /	THICKNESS

100 LB

23-13/16 IN

55 1/2 IN

300/FP/100 IN

ROLL IDENTIFIER	ROLL LENGTH	7068.5 M	ROLL WEIGHT	2871 KG

AA254K0502312

21444 FT

1302 LB

MISCELLANEOUS MILL/CUSTOMER DATA IN THIS AREA

1302

GCA5A1.IFD

<UNWIND <UNWIND <UNWIND <UNWIND <UNWIND <UNWIND