

**Part A – Specifications for Imageable MICR-Encoded Payment Items**

**3. PAPER SPECIFICATIONS**

**3.1 Paper Quality**

Grades of papers commonly used for the preparation of payment documents include bond, forms paper, carbonless paper, various safety papers, and special cheque papers including recycled paper. All grades of paper must meet the paper specifications defined below. Paper manufacturers should be conscious of the fact that magnetic particles in virgin or recycled paper may interfere with the correct reading of the MICR line and take the necessary steps to eliminate their presence in these products. The paper quality of carrier envelopes and cheque repair strips, used solely by financial institutions on rejected items, shall also conform to the following paper specifications.

The weight, finish and strength of 90 grams per square metre -- 90 g/m<sup>2</sup> (48M) paper -- are considered ideal for paper documents. The **minimum** specifications are as follows:

<b>TEST</b>	<b>METRIC STANDARD</b>
BASIS WEIGHT/ Grammage	90 g/m <sup>2</sup> (48M ± 5%)
Sheffield SMOOTHNESS	50 – 200 units
Calliper	104 micrometers (0.0039")
MULLEN (Burst) Specific to short grain	165 kPa (Kilopascals) (24 pounds – force per square inch PSI)
TEAR (Specific to Short Grain)	
Cross Direction	608 mN (Millinewtons)
Machine Direction	539 mN
STIFFNESS (per the Gurley technique)	165 kPa (Kilopascals) (24 pounds force per square inch PSI)
Cross Direction	0.11 mN meters
Machine Direction	0.25 mN meters
POROSITY (per the Gurley technique)	12 seconds

Further information on these tests can be obtained from the Forest Products Association of Canada and the Technical Association for the Worldwide Pulp, Paper and Converting Industry (TAPPI).

**3.2 Multiple Copies**

The requirement for multiple copies can be met using carbonless papers or by interleaving separate carbon tissues.

Carbonless papers are those which carry a dye that develops a legible copy upon writing or impact. Some coatings which make this possible may result in coating buildup on feed rollers in the equipment. Care should therefore be exercised in the selection of carbonless paper. Financial institutions should be aware that customer endorsement on carbonless paper cheques is not always legible to the naked eye and/or camera (on microfilm or image) when done with a ballpoint

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pen. Such items should be endorsed with a felt-tipped or fountain pen. Carbonized form sets are those which contain one or more copies having a carbon coating applied directly to the paper.

Carbon interleaved sets are no problem for automated document handling if it is only the original document that is sorted. If a subsequent (duplicate) copy is to be sorted (as is true with the register copy of many money orders), problems in sorting may be encountered if there is an appreciable transfer of carbon to the face of the copy. There are many circumstances under which either the original copy, or one of the multiple copies from these form sets, will be encoded and therefore find its way into the payments clearing system. For that reason, the way in which the special characteristics of these papers may affect the reader-sorter function must be considered.

**The use of carbon strips on the back of MICR-encoded documents is not permitted.**

### 3.3 Document Sizes

Note: In converting the Imperial measurements to Metric measurements in this Standard, some of the Metric figures have been rounded off, in most cases to the nearest hundredth of a centimeter.

All documents, excluding any detachable portions, are to be rectangular in shape. The following minimum and maximum dimensions shall be adhered to:

	Length	Depth
Minimum	15.88 cm (6 $\frac{1}{4}$ " )	6.99 cm (2 $\frac{3}{4}$ " )
Maximum	21.59 cm (8 $\frac{1}{2}$ " )	9.53 cm (3 $\frac{3}{4}$ " )

### 3.4 Business Reply Envelopes

The minimum size of documents established for the magnetic ink character recognition program is 15.88 cm x 6.99 cm (6 $\frac{1}{4}$ " x 2 $\frac{3}{4}$ " ), and the maximum size is 21.59 cm x 9.53 cm (8 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ " )

Since folded documents and creases through MICR characters increase the possibility of jams, misreads and rejects in reader-sorters, it is recommended that undersized business reply envelopes not be used.

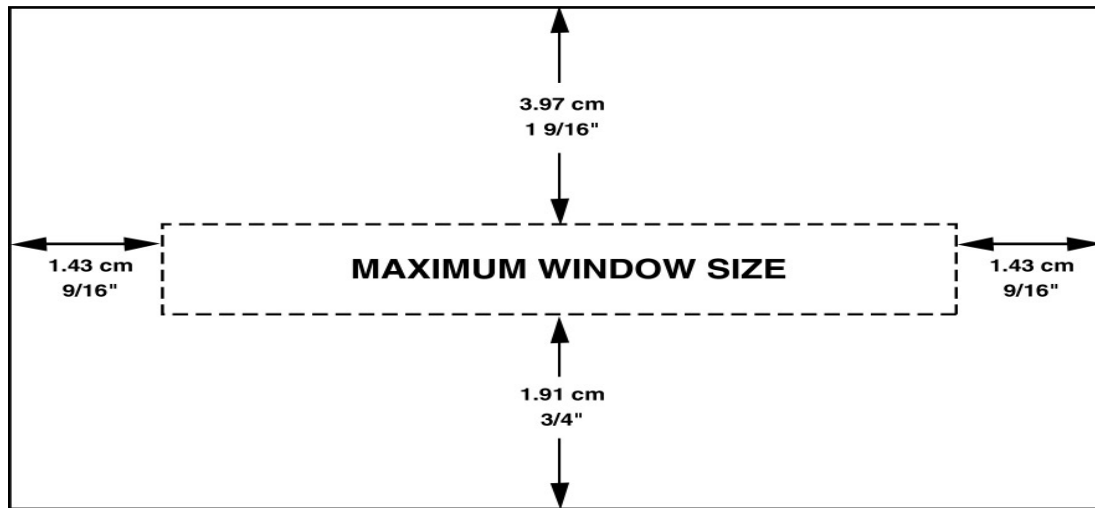
### 3.5 Window Envelope Documents

The window envelope cheque has been designed to meet Canadian post office standards, in that the maximum space allowed for the window is 1.91 cm ( $\frac{3}{4}$ " ) from the bottom edge of the envelope and 1.43 cm ( $\frac{9}{16}$ " ) from the right and/or left edge of the envelope and 3.97 cm ( $1\frac{9}{16}$ " ) from the top edge of the envelope.

For further information on window envelope specifications refer to the Canadian Postal Standards Manual.

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### 3.5.1 Window Envelope Limitations



### 3.6 Continuous Forms

#### 3.6.1 Perforations - Voucher and Pin-fed Documents

To avoid processing problems due to skew caused by irregular Tears, any detachable statement should be placed to the left or at the top of the payment item. While some document issuing methods may make such a format impracticable (for example, continuous pin-fed documents) clean perforations are essential to reduce the chances of mutilating such documents. It is essential in press perforations that no magnetic ink be deposited along the bottom 1.59 cm ( $\frac{5}{8}$ " ) band or right-hand edges of documents, such as would happen with inked press perforations.

Where document alignment holes are used, as for continuous pin-fed documents, the portions containing the holes on both edges of the document are to be perforated and detachable so they can be removed from the document before it is presented for payment.

When a document contains a detachable voucher, the voucher should be attached to the top or left side of the document. Pin-fed margins on either edge of the document must be removed prior to collection. This simply emphasizes the fact that the edges of the document destined for electronic sorting should be as clean and sharp as possible.

A MICR-encoded document that is accompanied by a non-detachable statement shall be considered as an item not conforming to Standard 006.

#### 3.6.2 Guide Marks

Selvage on continuous forms should be perforated. When this is not possible, guide marks must be provided to indicate the correct guillotining position. It is recommended that these guide marks not infringe upon the 1.59 cm ( $\frac{5}{8}$ " ) MICR band, as they introduce extraneous ink into the readable area.

- However, if guide marks do appear within the 1.59 cm ( $\frac{5}{8}$ " ) MICR band, they shall not be printed with magnetic ink.
- In order to reduce to potential for interference with the MICR characters, the horizontal marks shall be printed in the corners no higher than 0.3 cm (.12") from the bottom edge

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of the cheque and shall extend no more than .81 cm (.32") from the left and right edges of the cheque.

- To ensure your guide marks do not encroach too far into the MICR band, it is strongly recommended that horizontal guide marks not be larger than .635 cm (.25") in length, and that vertical guide marks not be larger than .15cm (.0575") in height. Guide marks larger than the recommended measurements may cause interference with the reading of the MICR information which could cause a failure in testing.

### **3.6.3 Edge Notching**

Documents intended for computer sorting may not be produced with notches or other types of indentation on any edge, as these can create equipment jams and interlocking of documents during processing.

### **3.6.4 Holes in Documents**

Because of the constraints of electronic processing equipment, holes of any shape or size in documents are not desirable. The use of holes in any type of MICR-encoded document must be cleared with your CPA member Quality Assurance Department.

### **3.6.5 Detachable Borders**

All detachable borders (e.g., voucher stubs and perforated pin-fed margins), must be removed before negotiation. All pin-fed borders on both edges of the document must be removable.

## **3.7 Cutting**

If possible, documents should be left a minimum of 2-4 hours before cutting. Documents should not be allowed to sit in piles of more than 350 sheets. This means frequent attention to the delivery platform while running and short piling during the drying period.

When cutting, extreme care should be exercised to make certain that the bottom and right edges of the documents are horizontal and vertical to the MICR line of characters. Otherwise, overall skew might occur and the documents may fail to meet the Standard. Furthermore, it is extremely important to cut the documents so that the MICR-encoding is properly positioned and that no guide marks or any portion thereof remain within the 1.59 cm ( $\frac{5}{8}$ " ) band of the document.

Also, cut in small quantities of not more than 200-250 sheets at once.