

SPECIFICATION FOR THERMAL TICKET MATERIAL FOR USE IN THE PORTABLE TICKETING DEVICES (PITix)

1. GENERAL

1.1. INTRODUCTION

This document calls for the supply of thermal ticket material to Metrorail. The material will be used in Portable Ticketing Devices (PITix) currently in service with Metrorail.

2. SCOPE OF SPECIFICATION

2.1 This specification sets out the requirements of Metrorail for ticket material, supplied in continuous rolls, for use in the Portable Ticketing Devices (PITix).

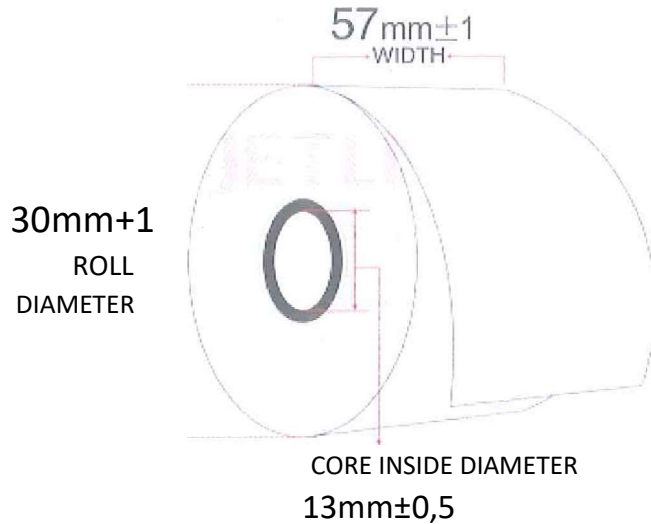
2.2 This specification sets out the requirements for thermal material.



3. MATERIAL IN ROLLS

3.1. The material shall be supplied in continuous rolls, without joints, splices or breaks, and wound onto a central circular core.

3.2. The inner core of the roll shall have the following dimensions:



- Inner diameter: $13\text{ mm} \pm 0,5\text{ mm}.$
- External diameter: $16\text{ mm} \pm 0,5\text{mm}.$
- Width: $57\text{ mm} +0, 1\text{ mm}; - 0,$

- 3.3. The core of the roll shall preferably be made of a synthetic material suitable for the purpose and shall not be deformed or collapse under normal conditions of transport or storage.
- 3.4. The material shall be wound evenly on the core and with sufficient tension, so as to prevent telescoping with normal handling.
- 3.5. The ticket material shall be wound to the inner core in the following direction:

With the roll resting on a horizontal surface, and viewed from the top, the tape shall be wound in a clockwise direction with the printing face facing outward or thermal coating on outside of roll. The security printing shall be orientated such that is read from the outer end of the material, when the outer end of the roll is held upwards..

- 3.2 The external diameter of a fully wound PITix roll shall be $30\text{ mm} \pm 0,1\text{ mm}.$

Tenderers are to state the length of material contained on a roll.

- 3.2 The width of the ticket shall be $57\text{ mm} \pm 0,1\text{ mm}.$ The width to be measured by an optical method.

- 3.2 Unless otherwise specified, the colour of the material is to be white

4 THERMAL MATERIAL FOR PITix ROLLS

The ticket material supplied by the tenderer for use in the Portable Ticketing Devices (PITix) on all the Metrorail regions must comply (firm requirement) to the following specifications:

- Material: Durable Thermal Paper Roll
- Thickness: 100mic Standard as per Tappi T-4111
- Thermal coating: Shall meet or exceed the ANSI 3. 11 specification
- Smoothness: Max. 75 Sheffield units
- Top coating: The thermo-sensitive surface of the ticket stock must be top coated
- Preprint: Tickets can be pre-printed on one, or both sides
- Ink for thermo-sensitive side: Laser printer approved ink without whiteners
- Ink for rear side: Offset ink

Tenderers to State the meterage on each roll.

END OF THE PITix THERMAL SPECIFICATION

5 PACKING AND LABELLING OF MATERIAL

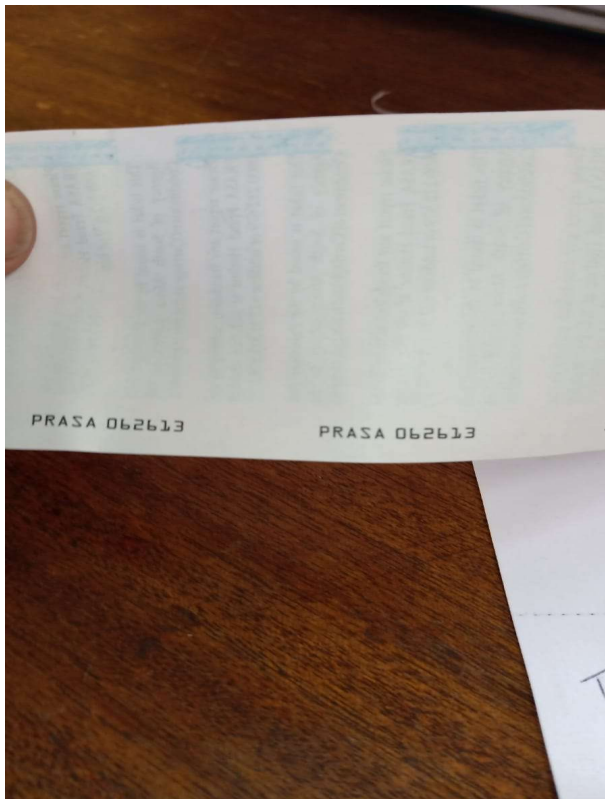
- 5.1 The supplier shall be entirely responsible to PRASA Rail for all the material until it is accepted by Metrorail and an acceptance certificate was issued.
- 5.2 PITix rolls shall be packed upright with rolls laid flat and each roll individually shrink wrapped in moisture proof wrapping in quantities of hundred and forty four in suitable corrugated carboard containers.
- 5.3 All PITix rolls shall be packed as to prevent damage in transit or storage.
- 5.4 Each carboard carton shall be permanently marked on at least two opposite sides with the following information
 - 5.4.1 Contents
 - 5.4.2 Quantity
 - 5.4.3 Sequence numbering
 - 5.4.4 Batch Number
 - 5.4.5 Order Number
- 5.5 All PITix rolls packed into a container shall be identical.

6 Roll Must be Preprint

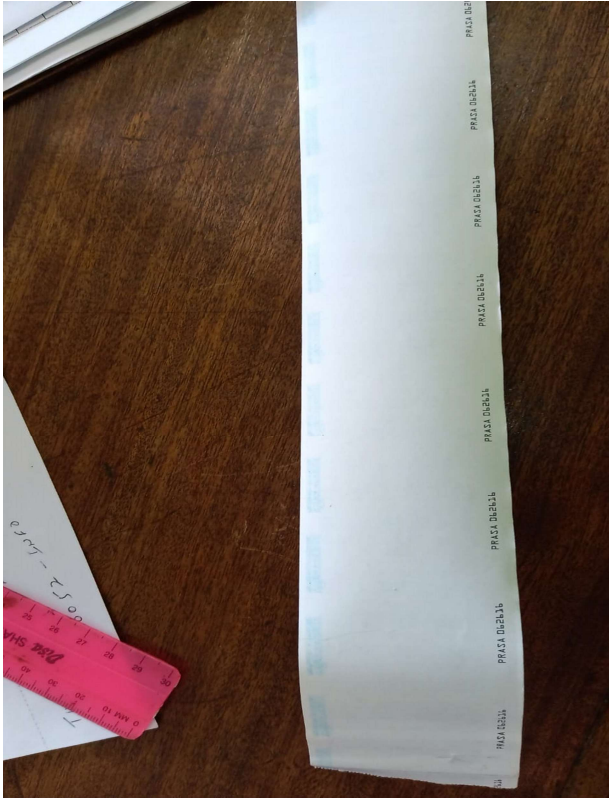
Each roll must have the following information on it.

1) On the front

- a. A unique number on the front of the roll (20mm long) (12 Digits long) the number must be continuous 18mm apart, each roll must have its own unique number. The numbers must run in sequence. The 1st number to be used will be given when the order is placed.



On the roll

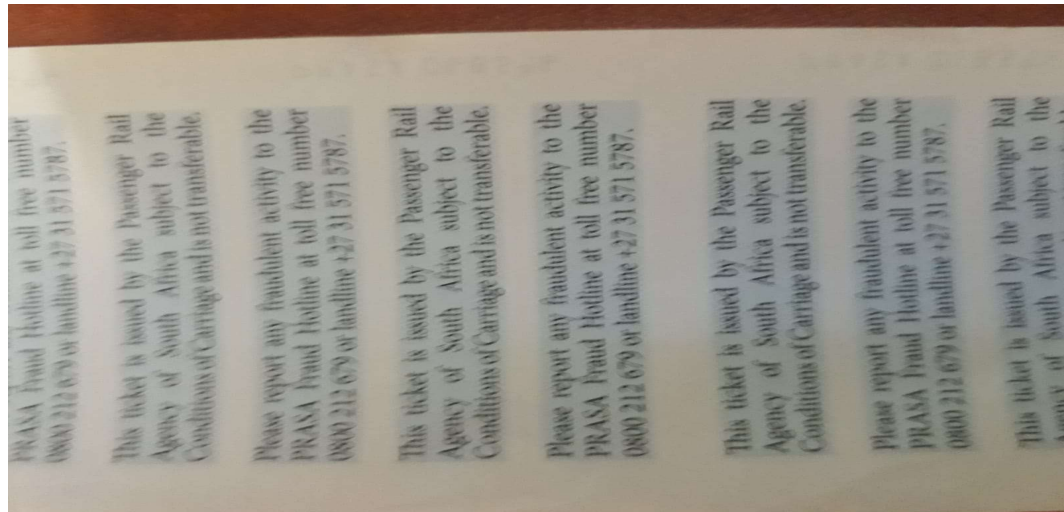


Front of the Roll (Where ticket print)

- 2) With the roll resting on a horizontal surface, and viewed from the top,
 - a. The security printing shall be orientated such that is read from the outer end of the material, when the outer end of the roll is held upwards..
 - b. On the Right side the roll number (From side to top of the number (4.5mm) and on the left side an image of a train (From side to top of the train image (8mm).
 - c. Between Train and number must be a gap off 44mm
 - d. A Red line (5mm wide) for 500mm from end of roll the line must be in the middle of the roll.

3) On the Back of the roll

- A message must be printed.
- The message must be on the full length of the roll.
- Each paragraph must be 8mm long.
- Between each paragraph a 4mm gap.



- e. The message will be updated as and when needed before the order is placed to be printed.

- f. The current message to be on the back of the roll is.

This ticket is issued by the Passenger Rail Agency of South Africa subject to the Conditions of Carriage and is not transferable.

Please report any fraudulent activity or Theft/Vandalism to the PRASA Joc 011 013 0052 Johannesburg 011 013 0055 Pretoria. Call Centre 0800 800 015.