

**SRI LANKA STANDARD 1255 : PART 3 : 2003**  
**ISO 7176 – 3 : 2003**

**METHODS OF TEST FOR**  
**NON - FOLDING WHEELCHAIRS**  
**PART 3 : DETERMINATION OF EFFECTIVENESS**  
**OF BRAKES**

**SRI LANKA STANDARDS INSTITUTION**

**METHODS OF TEST FOR  
NON - FOLDING WHEELCHAIRS  
PART 3 : DETERMINATION OF EFFECTIVENESS OF BRAKES  
[ WHEELCHAIRS-DETERMINATION OF EFFICTIVENESS OF BRAKES ]**

**SLS 1255 : Part 3 : 2003  
ISO 7176-3 : 2003**

Gr. J

**SRI LANKA STANDARDS INSTITUTION  
No. 17 , Victoria Place  
Off Eelvitigala Mawahta  
Colombo 08  
Sri Lanak**

## **NATIONAL FOREWORD**

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 2003-12-19 after it had been approved by the Sectoral Committee on Materials, Mechanical Systems and Manufacturing Engineering.

This Sri Lanka Standards is identical with ISO 7176-3:1988 “Wheelchairs-Determination of effectiveness of brakes” published by the International Organization for Standardization (ISO).

This standard is published in eight parts as follows:  
SLS 1255 Methods of test for non-folding wheelchairs

- Part 1 - Determination of static stability
- Part 3 - Determination of effectiveness of breaks
- Part 5 - Determination of overall dimensions, mass and turning space
- Part 7 - Measurement of seating and wheel dimensions
- Part 8 - Requirements and test methods for static, impact and fatigue strengths
- Part 11 - Test dummies
- Part 13 - Determination of coefficient of friction of test surfaces
- Part 22 - Set up procedures

### **Terminology and Convention**

The text of this International Standards has been accepted as suitable for publication without deviation, as a Sri Lanka Standard. However, certain terminology and conventions are not identical with those used in Sri Lanka Standards, and hence the attention is drawn to the following:

- i) Wherever the words ‘International Standard’ appear, referring to this standards they should be read as ‘Sri Lanka Standard’.
- ii) The comma has been used throughout as a decimal marker. In Sri Lanka Standards, the current practice is that a full point on the base line is used as the decimal marker.

In reporting the result of a test or an analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with **CS 102**.

# Wheelchairs —

## Part 3:

# Determination of effectiveness of brakes

## 1 Scope

This part of ISO 7176 specifies test methods for the measurement of the effectiveness of brakes of manual wheelchairs and electrically powered wheelchairs, including scooters, intended to carry one person, with a maximum speed not exceeding 15 km/h. It also specifies disclosure requirements for the manufacturer.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6440, *Wheelchairs — Nomenclature, terms and definitions*

ISO 7176-6, *Wheelchairs — Part 6: Determination of maximum speed, acceleration and deceleration of electric wheelchairs*

ISO 7176-11, *Wheelchairs — Part 11: Test dummies*

ISO 7176-13, *Wheelchairs — Part 13: Determination of coefficient of friction of test surfaces*

ISO 7176-15, *Wheelchairs — Part 15: Requirements for information disclosure, documentation and labelling*

ISO 7176-22, *Wheelchairs — Part 22: Set-up procedures*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6440 and the following apply.

### 3.1

#### **running brake**

means to stop or to slow the wheelchair

### 3.2

#### **control device**

means by which the user directs an electrically powered wheelchair to move at the desired speed and/or in the desired direction of travel

### 3.3

#### **parking brake**

means to keep the wheelchair stationary