

---

---

**Wheelchairs —**

**Part 16:**

**Resistance to ignition of upholstered parts —  
Requirements and test methods**

*Fauteuils roulants —*

*Partie 16: Résistance à l'inflammation des parties rembourrées —  
Exigences et méthodes d'essai*



## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of Electrotechnical Standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75% approval by the member bodies voting.

International Standard ISO 7176-16 was prepared by Technical Committee ISO/TC 173, *Technical systems and aids for disabled or handicapped persons*, Subcommittee 1, *Wheelchairs*.

ISO 7176 consists of the following parts under the general title *Wheelchairs*:

- Part 1: *Determination of static stability*
- Part 2: *Determination of dynamic stability of electric wheelchairs*
- Part 3: *Determination of efficiency of brakes*
- Part 4: *Determination of energy consumption of electric wheelchairs and scooters — Theoretical range*
- Part 5: *Determination of overall dimensions, mass and turning space*
- Part 6: *Determination of maximum speed, acceleration and retardation of electric wheelchairs*
- Part 7: *Measurement of seating and wheel dimensions*

© ISO 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case postale 56 • CH-1211 Genève 20 • Switzerland  
Internet central@iso.ch  
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

- Part 8: *Requirements and test methods for static, impact and fatigue strengths*
- Part 9: *Climatic tests for electric wheelchairs*
- Part 10: *Determination of obstacle-climbing ability of electric wheelchairs*
- Part 11: *Test dummies*
- Part 13: *Determination of coefficient of friction of test surfaces*
- Part 14: *Power and control systems for electric wheelchairs - Requirements and test methods*
- Part 15: *Requirements for information disclosure, documentation and labelling*
- Part 16: *Resistance to ignition of upholstered parts - Requirements and test methods*

The following parts are also on the programme of work:

- Part 17: *Serial interface for electric wheelchair controllers*
- Part 18: *Stair-traversing devices*
- Part 19: *Wheeled mobility devices for use in motor vehicles*
- Part 20: *Determination of the performance of stand-up type wheelchairs.*
- Part 21: *Electromagnetic compatibility of powered wheelchairs and motorized scooters - Requirements and test methods.*
- Part 22: *Setup procedures*

A Technical Report will also be made available giving a simplified explanation of these International Standards.

This document is a preview generated by EVS

This page intentionally left blank

## Wheelchairs —

### Part 16: Resistance to ignition of upholstered parts — Requirements and test methods

#### 1 Scope

This part of ISO 7176 specifies requirements and methods of test to assess the resistance to ignition by cigarette and match of the materials used in wheelchair upholstered parts.

The tests measure only the resistance to ignition by cigarette and match of the materials tested and not the ignitability of the finished wheelchair. They give an indication of, but cannot guarantee, the ignition behaviour of the finished wheelchair.

NOTE: The requirements are minimal and less severe than legal requirements in some countries. Manufacturers are recommended to use materials with superior flame resistance where practical.

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 7176. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 7176 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6440:1985, *Wheelchairs - Nomenclature, terms and definitions*.

ISO 8191-1:1987, *Furniture - Assessment of the ignitability of upholstered furniture - Part 1: Ignition source: smouldering cigarette*.

ISO 8191-2:1988, *Furniture - Assessment of the ignitability of upholstered furniture - Part 2: Ignition source: match flame equivalent*.

ISO 7176-15:1996, *Wheelchairs - Part 15: Requirements for information disclosure, documentation and labelling*.