

# American National Standard

*for Consumer Turf Care Equipment –  
Pedestrian-Controlled Mowers  
and Ride-On Mowers –  
Safety Specifications*

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**ANSI/OPEI B71.1-2017**

Revision of  
ANSI/OPEI B71.1-2012

American National Standard  
for Consumer Turf Care Equipment –  
**Pedestrian-Controlled Mowers  
Ride-On Mowers –  
Safety Specifications**

Secretariat

**Outdoor Power Equipment Institute, Inc. (OPEI)**

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# American National Standard

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**Foreword** (This foreword is not part of American National Standard ANSI/OPEI B71.1-2017.)

This standard is a revision of American National Standard for Consumer Turf Care Equipment - Walk-Behind Mowers and Ride-On Machines with Mowers - Safety Specifications, ANSI/OPEI B71.1-2012. The first edition of this standard was approved and published by the American National Standards Institute in 1960. It has been revised fourteen times since initial publication, including this revision.

The present revision was prepared by the Outdoor Power Equipment Institute's (OPEI) Lawn Mower Committee, as part of OPEI's continuing work on standards.

A summary of the principal changes included in this revision are as follows:

**Part I - General:**

- 2** Normative references - Removed revision dates
- 3** Definitions - Updated

**Part II - Pedestrian-Controlled Mowers:**

- 5.4** Guards which need frequent access may be no-tools (harmonized with ANSI/OPEI B71.4)
- 5.5** Pressurized hydraulic hose guarding added (harmonized with ANSI/OPEI B71.4)
- 6.3** Stored energy safety sign (harmonized with ANSI/OPEI B71.4)
- 8.1** Revised label durability ASTM reference
- 10.1.4** Revised other openings - limited number and size
- 10.2.1** Moved grass catcher durability message to the instructions
- 10.3.6.1** Defined an operator target for grass catchers structural integrity test
- 10.3.7.1** Redefined operator target for thrown object test
- 12.1** Single-color only safety warnings are not permissible
- 14** Requirements added for mowers not subject to CPSC 1205 regulation

**Part III - Ride-On Mowers:**

- 16.2.2.2** Added electrical option for PTO control
- 17.4** Guards which need frequent access may be no-tools (harmonized with ANSI/OPEI B71.4)
- 17.6** Pressurized hydraulic hose guarding added (harmonized with ANSI/OPEI B71.4)
- 18.3** Stored energy safety sign (harmonized with ANSI/OPEI B71.4)
- 21.1.3** Added ROPS exemption for Out-Front Zero-Turn mowers, 400-600 kg, stability >25 degrees
- 21.2.4.1** Limited sudden traction test to fixed-ratio transmission units
- 22.1** Single-color only safety warnings are not permissible
- 24.1.4** Revised other openings - limited number and size
- 24.2** Moved grass catcher durability message to the instructions

**Figures:**

- 5** Updated figure to match text
- 6** Updated safety messages, eliminated duplicates, and combined pedestrian-controlled and ride-on
- 11(g)** Figure for new operator target for grass catcher

Consensus for this standard was achieved by use of the Canvass Method. This standard contains annexes that are all informative and are not considered requirements of this standard.

Suggestions for improvement of the standard are welcome. They should be sent to the Outdoor Power Equipment Institute, 341 South Patrick Street, Alexandria, VA 22314, or [www.opei.org](http://www.opei.org).

The following organizations, recognized as having an interest in the standardization of safety requirements for pedestrian-controlled mowers and ride-on mowers, were contacted prior to the approval of this revision of the standard. Inclusion in the list does not necessarily imply that the organization concurred with the submittal of the proposal to ANSI.

**Producers**

Ariens Company  
Jacobsen, A Textron Company  
Kawasaki Motors Corporation  
Scag Power Equipment

**Users**

Steven A. Points, independent consultant  
Thomas L. Wise, independent consultant

**General Interest**

American Society of Agricultural and Biological Engineers (ASABE)  
Consumer Product Safety Commission (CPSC)  
Dan Nielsen, independent consultant  
Underwriters Laboratories



American National Standard  
for Consumer Turf Care Equipment –

# Pedestrian-Controlled Mowers and Ride-on Mowers – Safety Specifications

## Part I: General

### 1 Scope

The safety specifications given in this standard are for powered

- (a) reel and rotary pedestrian-controlled lawn mowers,
- (b) reel and rotary ride-on lawn mowers,
- (c) ride-on lawn tractors with mower attachments,
- (d) ride-on lawn and garden tractors with mower attachments, and
- (e) lever-steer and zero-turn ride-on mowers.

These specifications are intended to provide safety requirements and to help ensure uniform operator environments. They are intended to apply to products specifically intended as consumer products for the personal use of a consumer around a house. These specifications are not intended to apply to commercial products customarily used by hired operators or to products designed primarily for agricultural purposes such as defined in SAE J1116. They are not intended to cover sulky-type units, pedestrian-controlled tractors, flail mowers or sickle bar mowers, and are not intended to completely cover electrical requirements. This standard applies to all aftermarket parts, attachments and accessories. Any manufacturer of aftermarket parts, attachments and accessories is responsible for ensuring compliance to this standard. Safety specifications in this standard apply only to a configuration of attachments/implements/accessories approved by their respective manufacturers.

The U.S. Consumer Product Safety Commission (CPSC) has promulgated a mandatory standard relating to certain aspects of pedestrian-controlled power lawn mower operations (SAFETY STANDARD FOR WALK-BEHIND POWER LAWN MOWERS, CPSC 16 CFR PART1205). A copy of the CPSC mandatory standard is contained in Annex C. The CPSC standard contains requirements for products sold in the US by manufacturers of consumer pedestrian-controlled lawn mowers that meet any of the following criteria:

- a) Cutting width between 305 mm (12 inches) and 762 mm (30 inches)
- b) Mass less than 90.7 kg (200 pounds)
- c) Engine horsepower less than 6 kW (8 hp).

The effective implementation date of this standard shall be two (2) years after the publication date and shall apply to all products built after that date. Manufacturers may also comply with the requirements of this standard any time after the publication date.

### 2 Normative references

The following standards contain provisions, which through reference in this text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI Z535.4, *Product safety signs and labels*<sup>1)</sup>

<sup>1)</sup> ANSI and ISO standards available from the American National Standards Institute, 25 West 43<sup>rd</sup> Street, New York, NY 10036; (212) 642-4900; www.ansi.org.