

ANSI/OPEI B71.4-2017

# American National Standard

*for Commercial Turf Care Equipment –  
Safety Specifications*

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**ANSI/OPEI B71.4-2017**

Revision of  
ANSI/OPEI B71.4-2012

American National Standard  
for Commercial Turf Care Equipment –  
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 B71.4-2017.)

This standard is a revision of *American National Standard for Commercial Turf Care Equipment - Safety Specifications*, ANSI/OPEI B71.4-2012. The first edition of this standard was approved and published by the American National Standards Institute in 1980. It has been revised six times since initial publication, including this revision.

The present revision was prepared by the Outdoor Power Equipment Institute's (OPEI) Commercial Turf Care 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 – Updated & removed revision dates
- 3 Definitions – Updated

**Part II – Pedestrian-Controlled Machines:**

- 7.3 Pressurized hydraulic hose guarding added (harmonized with ANSI/OPEI B71.1)
- 9.2 Single-color only safety warnings are not permissible (harmonized with ANSI/OPEI B71.1)
- 10.3.4 A separate parking brake is no longer required if equipped with a service brake
- 10.5.8 Lateral stability test no longer required for stand-on sulkies
- 11.2.2.3 Revised other openings – limited number and size
- 11.4.2 Foot probe test was revised (harmonized with ANSI/OPEI B71.1)
- 11.4.4; 11.4.5 Structural integrity tests were revised (harmonized with ANSI/OPEI B71.1)
- 11.4.6 Thrown object test was revised (harmonized with ANSI/OPEI B71.1)
- Removed required OM hydraulic component language
- Removed requirements for hydraulic components

**Part III – Ride-On Units, Ride-On Turf Tractors, and Attachments:**

- 15.8 Slope control test was revised
- 17.3 Pressurized hydraulic hose guarding added (harmonized with ANSI/OPEI B71.1)
- 19.2 Single-color only safety warnings are not permissible (harmonized with ANSI/OPEI B71.1)
- 20.3.5.1 Lift-off gauge added to lateral stability test
- 20.4.4 A separate parking brake is no longer required if equipped with a service brake
- 21.2.2.3 Revised other openings – limited number and size
- 21.4.2 Foot probe test was revised (harmonized with ANSI/OPEI B71.1)
- 21.4.4; 21.4.5 Structural integrity tests were revised (harmonized with ANSI/OPEI B71.1)

**21.4.6** Thrown object test was revised (harmonized with ANSI/OPEI B71.1)

- Removed required OM hydraulic component language
- Removed requirements for hydraulic components

**Figures:**

**3** Recommended safety instructions were revised

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/individuals, recognized as having an interest in the standardization of safety requirements for commercial turf care equipment, 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  
Kubota Tractor Corporation  
Scag Power Equipment

**Users**

Jimmy Eavenson, Eavenson Consulting LLC  
Steven A. Points  
Thomas L. Wise

**General Interest**

American Society of Agricultural and Biological Engineers (ASABE)  
Consumer Product Safety Commission (CPSC)  
Dan Nielsen, OPE Investigations

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## American National Standard

# for Commercial Turf Care Equipment – Safety Specifications

## Part I: General

### 1 Scope

The safety specifications given in this standard are for powered (a) pedestrian-controlled machines, (b) ride-on machines and (c) implements for use with pedestrian and ride-on machines intended for marketing as commercial turf care equipment and that are customarily used by hired operators. Equipment covered may consist of two or more components that are functionally connected and may be produced by different manufacturers. Specific requirements are established in the standard for reel, rotary, and flail mowers as well as power rakes because of their prevalence, but this standard is intended to apply to all types of commercial turf care equipment. Each functional component shall conform to each section of this standard as it logically applies. Additionally, this standard applies to all aftermarket parts, attachments and accessories. Any manufacturer of aftermarket parts, attachments, implements, and accessories is responsible for ensuring compliance to this standard. Safety specifications in this standard apply only to a configuration of attachments, implements, and accessories approved by their respective manufacturers.

These specifications are not intended to apply to:

- turf care equipment that is designed primarily for personal use by a consumer in or around a permanent or temporary household or residence;
- equipment that is designed primarily for agricultural purposes; and
- equipment that is designed primarily for cutting grass and other growth on highways and is designed for operation with agricultural/industrial tractors.

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 anytime 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>

ANSI/ASAE S279.14, *Lighting and marking of agricultural equipment on highways*

ANSI/SAE J1163, *Determining seat index point*

ANSI/SAE J1362, *Graphical symbols for operator controls and displays on off-road self-propelled work machines*

ANSI/UL 73, *Standard for safety for motor-operated appliances*

ASAE S217.12 (ISO 730-1:1994), *Three-point free-link attachment for hitching implements to agricultural wheeled tractors*

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