

ANSI/BHMA A156.19-2002
Revision of ANSI/BHMA A156.19-1997



AMERICAN NATIONAL STANDARD
FOR
POWER ASSIST AND LOW ENERGY POWER OPERATED DOORS



SPONSOR
BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

AMERICAN NATIONAL STANDARDS INSTITUTE, INC.
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AMERICAN NATIONAL STANDARD

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FOREWORD (This Foreword is not a part of ANSI/BHMA A156.19)

The general classification of builders hardware includes a wide variety of items which are divided into several categories. To recognize this diversity, a sectional classification system has been established. Power Operated Doors is one such section and this Standard is a result of the collective efforts of members of the Builders Hardware Manufacturers Association, Inc. who manufacture this product. The total Product Standards effort is, therefore, a collection of sections, each covering a specific category of items.

Performance tests and, where necessary, dimensional requirements have been established to ensure a degree of safety. There are no restrictions on design except for those dimensional requirements imposed for reasons of safety.

This Standard is not intended to obstruct but rather to encourage the development of improved products, methods and materials. The BHMA recognizes that errors will be found, items will become obsolete, and new products, methods and materials will be developed. With this in mind, the Association plans to update, correct and revise these Standards on a regular basis. It shall also be the responsibility of manufacturers to request such appropriate revisions.

To find products that are third-party certified to this standard and other ANSI/BHMA standards please visit www.buildershardware.com.

The Builders Hardware Manufacturers Association (BHMA) Certification Program was developed as a means for producers of builders hardware to indicate compliance with American National Standards sponsored by BHMA. Participating manufacturers certify compliance with the standards based on a continuing program of passing the prescribed tests. Third party testing is performed by a Nationally Recognized Test Laboratory. The program is open to all manufacturers of builders hardware whether or not they are members of BHMA.

TABLE OF CONTENTS

1.	GENERAL	5
2.	DEFINITIONS	5
3.	REQUIREMENTS FOR SWINGING POWER ASSIST DOORS	5
4.	REQUIREMENTS FOR LOW ENERGY SWINGING POWER OPERATED DOORS OR LOW ENERGY SWINGING POWER OPEN DOORS	6
5.	CYCLE TESTS	6
6.	SIGNS	9
	APPENDIX A (not a part of ANSI/BHMA A156.19).....	10

1. GENERAL

1.1 **Scope** Requirements in this Standard apply to power assist doors, low energy power operated doors or low energy power open doors for pedestrian use, and some small vehicular use and not provided for in ANSI/BHMA A156.10 for Power Operated Pedestrian Doors. Included are provisions intended to reduce the chance of user injury or entrapment.

1.1.1 This Standard does not attempt to assess any factors that exist with respect to custom design installations which are not required to meet the requirements of this Standard.

1.2 Required dimensions are expressed in US units first and the SI (metric) equivalents given in parentheses are approximate. All values which do not carry specific tolerances or are not marked maximum or minimum shall have the following tolerances: Linear dimensions shall be $\pm 1/16$ in (1.6 mm). Pounds or pound force shall be $\pm 5\%$. Angular measurements shall be ± 4 degrees. Voltage measurements shall be $\pm 5\%$. Temperature measurements shall be ± 4 degrees F (± 2 degrees C).

1.3 Definitions of terms used but not found in this Standard are in ANSI/BHMA A156.10 for Power Operated Pedestrian Doors, available at www.buildershardwre.com and the American National Standards Institute, Inc., 11 West 42nd Street, New York, NY 10036.

1.4 All references to time delay, opening speed and forces, in this standard, refer to the operator in the power mode as opposed to the manual mode.

1.5 **Use on Fire Doors.** A door closer used on labeled fire door assemblies shall be listed or labeled by a nationally recognized independent testing laboratory, and be subject to a periodic in-plant follow-up service. Consult the authority having jurisdiction for the appropriate fire test requirements.

2. DEFINITIONS

2.1 **Low Energy Power Operated Door:** A door with (a) power mechanism(s) that opens and closes the door upon receipt of an actuating signal and does not generate more kinetic energy than specified in this Standard.

2.2 **Low Energy Power Open Door:** A door with (a) power mechanism(s) that opens the door upon receipt of an actuating signal and does not generate more kinetic energy on opening than specified in this Standard, and which is closed by other means.

2.3 **Power Assist Door:** A door with a power mechanism that reduces the opening resistance of a self closing door.

2.4 **Small Vehicular:** Carts used to transport people or objects.

3. REQUIREMENTS FOR SWINGING POWER ASSIST DOORS

3.1 Power assist doors shall operate only by the force of pushing or pulling the door.

3.2 An activating mechanism is permitted to be used to put the door in the power assist mode.

3.3 If the opening force on the door is released, the door shall come to a stop and either immediately begin to close or begin to close after a predetermined time.

3.4 Doors shall be field adjusted to close from 90 degrees to 10 degrees in not less than 3 seconds or longer as required in Table I.