

ANSI/BHMA A156.10-2017

Revision of ANSI/BHMA A156.10-2011



STANDARD
FOR
POWER OPERATED PEDESTRIAN DOORS



SPONSOR
BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

AMERICAN NATIONAL STANDARDS INSTITUTE
Approved July 21, 2017

AMERICAN NATIONAL STANDARD

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FOREWORD

(This Foreword is not a part of ANSI/BHMA A156.10)

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.

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1. GENERAL

1.1 **Scope** Requirements in this Standard apply to power operated doors for pedestrian use which open automatically when approached by pedestrians and some small vehicular traffic or by a knowing act. Included are provisions to reduce the chance of user injury or entrapment. Power operated doors for industrial or trained traffic are not covered in this Standard.

1.1.1 Where this Standard contains specifications relating to minimum or maximum dimensions of various components of power operated doors for pedestrian use and some small vehicular traffic, such dimensions are included to provide user protection for what are, in the industry, standard application conditions. This Standard does not apply to custom installations.

1.2 This Standard does not apply to power assist and low energy power operated doors. Refer to ANSI/BHMA A156.19 for Power Assist and Low Energy Power Operated Doors.

1.3 Required dimensions are expressed in US units first; approximate metric equivalents follow in parentheses. The following is a conversion chart for inches to approximate mm equivalents where not given in the standard.

TO CONVERT INCHES TO MILLIMETERS, MULTIPLY INCHES BY 25.4 TO CONVERT MILLIMETERS TO INCHES, MULTIPLY MILLIMETERS BY 0.03937.							
Inches	<i>mm</i>	Inches	<i>mm</i>	Inches	<i>mm</i>	Inches	<i>Mm</i>
1/16	1.6	6	152	23	584	45	1143
1/4	6.35	7	178	24	610	47	1194
1/2	12.7	8	203	25	635	48	1219
3/4	19	9	229	26	660	49	1245
1	25.4	10	254	27	686	50	1270
1 1/2	38	11	279	28	711	51	1295
1 3/4	45	12	304	30	762	52	1321
1 1/2	38	13	330	31	787	53	1346
2	51	14	356	32	813	54	1372
2.26	57	15	381	33	838	55	1397
2 1/2	63	16	406	34	864	56	1422
3	76	17	432	36	914	57	1448
3 3/4	95	20	508	40	1016	58	1473
4	102	21	533	41	1041	60	1524
5	127	22	559	43	1092	144	3658

1.4 American National Standards referenced in A156.10 are available from BHMA, www.buildershardware.com or the American National Standards Institute, www.ansi.org.

1.5 **Tolerances** Where only minus tolerances are given, the dimensions are permitted to be exceeded at the option of the manufacturers. 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 $\pm 2\%$. Degrees opening shall be ± 2 degrees. Electrical measurements shall be $\pm 2\%$.

1.6 Tests described in this standard are performed under laboratory conditions. Measurements shall be taken under neutral air pressure conditions. In actual usage, results vary because of installation, maintenance and environmental conditions.