

ANSI/BHMA A156.115-2006



**AMERICAN NATIONAL STANDARD**

**FOR**

**HARDWARE PREPARATION IN STEEL DOORS AND STEEL FRAMES**



**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 A156.115)

This Standard was first published by the Door and Hardware Institute in a series of individual A115 standards, which are now combined into single documents for steel and wood doors. ANSI approval was secured under the Canvass Method. BHMA was accredited on 21 March 1983 by ANSI as a sponsor using the Canvass Method.

This Standard was developed as a joint effort by members of SDI, WDMA, DHI, HMMA, BHMA and CSDMA. The committee is grateful to Allan Ashachik for his guidance and technical contributions as the first chairman of the reconstituted group. 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 is recommended that individual manufacture's catalogs be consulted.

Users of this Standard should also consult applicable local building codes as to requirements affecting the functions of hinges used on fire doors.

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## 1. SCOPE AND PURPOSE

1.1 This Standard covers all significant dimensional attributes for mounting common hardware products in steel doors and frames. All dimensions shall be as shown on the accompanying drawings.

1.2 This standard was developed to show only the most commonly used preparations for door hardware, and provide targets for standardization. Where multiple configurations are in common usage, separate drawings are provided. For other configurations, it is recognized that these standards may be used in part, or with exceptions, while still providing some degree of basic guidance and standardization.

## 2. GENERAL REQUIREMENTS

2.1 **Preparations** covered by this standard are intended for use in doors 1 3/4 inches (44.5mm) ± 1/16 inch (1.6mm) in thickness unless otherwise specified.

2.2 **The center line** of the lock in the door shall be located in reference to the center line of its strike.

2.3 **Location of Operable Parts** in accessible openings shall be between 34 and 48 inches.

2.4 **Door Edge** Doors shall be furnished with a beveled or square edge unless otherwise specified.

2.5 **Door Reinforcement** Doors shall be properly reinforced to support the performance requirements of the hardware application.

2.6 **Tolerances** for cutouts are shown on individual drawings.

2.7 **Metric Equivalents** are shown in the table below (inclusion in the individual drawings is not possible due to size constraints).

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>
.005	.1	1/2	12.7	1 1/2	38.1	3 23/32	94.5
.008	.2	9/16	14.3	1 5/8	41.3	3 3/4	95.3
.015	.4	5/8	15.9	1 3/4	44.5	3 7/8	98.4
1/64	.4	11/16	17.5	1 49/64	44.8	4	101.6
1/32	.8	23/32	18.3	1 13/16	46.0	4 1/8	104.8
1/16	1.6	3/4	19.1	2	50.8	4 1/2	114.3
5/64	2	13/16	20.6	2 1/8	54	4 9/16	115.9
3/32	2.4	27/32	21.4	2 1/4	57.2	4 7/8	123.8
1/8	3.2	7/8	22.2	2 7/16	61.9	5	127
9/64	3.6	57/64	22.6	2 15/32	62.7	5 1/2	139.7
5/32	4	15/16	23.8	2 1/2	63.5	5 3/4	146.1
7/32	5.6	31/32	24.6	2 3/4	69.9	6 1/4	158.8
15/64	6	1	25.4	2 27/32	72.2	6 1/2	165.1
1/4	6.4	1 1/16	27	3 1/4	82.6	6 3/4	171.5
5/16	7.9	1 1/8	28.6	3 5/16	84.1	7	177.8
3/8	9.5	1 15/64	31.4	3 3/8	85.7	7 1/4	184.2
7/16	11.1	1 1/4	31.8	3 1/2	88.9	8	203.2
15/32	11.9	1 3/8	34.9	3 5/8	92.1	35 1/2	901.7