

ANSI/BHMA A156.1-2016
Revision of ANSI/BHMA A156.1-2013



**AMERICAN NATIONAL STANDARD for
BUTTS AND HINGES**



SPONSOR
BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

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AMERICAN NATIONAL STANDARD

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FOREWORD (This Foreword is not a part of ANSI/BHMA A156.1)

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. Butts and Hinges 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, material and dimensional requirements have been established to insure safety and stability to which the public is entitled. There are no restrictions on design except for those dimensional requirements imposed for reasons given above. It is also required that hinges fit certain cut-out dimensions.

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.

In most cases, products have been described in grade levels related to performance with Grade 1 being the top rating. Grade classifications indicate levels only within their own product category. Choice of grade and specific product are made on the basis of utility, aesthetics, security objectives and end use desired.

The BHMA numbers which indicate types of hardware do not identify size, finish, or design and are not intended to be used without necessary supplementary information. Individual manufacture's catalogs are consulted.

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

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1. SCOPE

1.1 This Standard establishes requirements for butts and hinges. Cycle tests, lateral and vertical wear tests, friction tests, strength tests, finish tests, and material and dimensional requirements are included.

1.2 Tests described in this Standard are performed under laboratory conditions. In actual usage, results vary because of installation, maintenance and environmental conditions.

1.3 **Grade Qualifications** Manufacturers shall indicate the Grade level of their hinges. Hinges shall meet all tests for their grade listing. A Grade 1 (Heavy Duty) hinge shall meet all Grade 1 criteria, a Grade 2 (Standard Weight) hinge shall meet all Grade 2 criteria, a Grade 3 (Standard Weight) hinge shall meet all Grade 3 criteria, and a Grade 4 (Light Weight) hinge shall meet all Grade 4 criteria. See Tables 3.8 and 4.6 for hinge grading criteria.

1.4 Consult NFPA 80-2016 for Fire Doors and Windows concerning hinge requirements for fire doors.