

ANSI/BHMA A156.20-2006
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AMERICAN NATIONAL STANDARD
FOR
STRAP AND TEE HINGES, AND HASPS



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 A156.20)

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. Strap and Tee Hinges, and Hasps is one such section and this Standard is the 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.

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 their durability. Grade classifications indicate levels only within their own product categories. 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 and functions of hardware do not identify size or finish and are not intended to be used without necessary supplementary information. Individual manufacturers' catalogs are consulted.

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1. SCOPE

- 1.1 This Standard establishes requirements for Strap Hinges, Tee Hinges, and Hasps, and includes performance tests covering operational and strength criteria.
- 1.2 Tests described in this Standard are performed under laboratory conditions. In actual usage, results vary because of installation, maintenance and environmental conditions.

2. DEFINITIONS

- 2.1 **Strap Hinge** A surface mounted hinge with similar long narrow leaves.
- 2.2 **Tee Hinge** A surface mounted hinge composed of a strap hinge door leaf and a short butt jamb leaf.
- 2.3 **Hinge Size** The nominal overall length of the closed hinge. A minus tolerance of 1/16 in (1.6 mm) is permitted. Dimensions are permitted to exceed within the functional limitations of the product.
- 2.4 **Hasp, Adjustable Staple** The staple will adjust to compensate for shrinking or sagging of the door.
- 2.5 **Hasp, Swivel Staple or Latching Post** The staple or post rotates to latch the hasp.
- 2.6 **Hasp, Rotating Post** The portion engaged by a padlock rotates but need not latch.
- 2.7 **Hasp, Safety** The screw attachments are concealed in the closed position.
- 2.8 **Hasp Size** The nominal overall closed length $\pm 1/8$ in (3.2 mm).

3. GENERAL

- 3.1 **Dimensions** US units are used in this Standard with approximate SI unit (metric) equivalents given in parentheses.
- 3.2 **Reference to Other Standards** ANSI Standards references in this Standard are available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036.
- 3.3 **Design Options** There are no restrictions on design, except for dimensional requirements imposed. Items of design meeting the performance requirements in the grade category desired shall be design options for those illustrated. See individual manufacturers' catalogs.
- 3.4 **Hinge Test Conditions**
- 3.4.1 **Test Door** The test door size and weight for each size and weight of hinge is indicated in Table I. The thickness of the test door shall be sufficient to maintain the rigidity of the door and to provide for the specified door weight.
- 3.4.2 **Hinge Spacing** The hinge spacing shall be as indicated in Table I. All sizes shall have three hinges per door. Screws provided with the hinges shall be used.
- 3.4.3 **Mounting** The test door with hinges shall be mounted to a rigid member that simulates the jamb. The door shall be able to be operated freely through at least 90 degrees. The hinges shall be carefully aligned and spaced to eliminate hinge bind.
- 3.4.4 **Dial Indicator** A dial indicator shall be used to measure horizontal permanent set at the top hinge. (See Figure 1).