

ANSI/BHMA A156.32-2023

Revision of ANSI/BHMA A156.32-2014



**STANDARD for
INTEGRATED SWINGING DOOR OPENING ASSEMBLIES**



**SPONSOR
BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.**

**AMERICAN NATIONAL STANDARDS INSTITUTE
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FOREWORD (This Foreword is not a part of ANSI/BHMA A156.32)

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. Section Q for Integrated Door Opening Assemblies, is one such section and this Standard is the result of the collective efforts of members of the Builders Hardware Manufacturers Association, Inc. (BHMA) who manufacture these products. The total Product Standards effort is therefore, a collection of sections, each covering a specific category of items.

Strength, cycle, and operational tests have been established to ensure safety and stability to which the public is entitled. There are no restrictions on design.

This Standard is not intended to obstruct but rather to encourage the development of improved products, methods and materials. BHMA recognizes that errors will be found, items will become obsolete, and new products and methods 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.

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

BHMA product categorizations do not provide detailed information on size, functionality, or aesthetic design. When specifying a product, it may be necessary to provide additional information, such as referencing specific manufacturers, to ensure the desired product characteristics are met.

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1. SCOPE

1.1 This Standard establishes requirements for Integrated Swinging Door Opening Assemblies supplied complete and ready to install with all integral hardware. At a minimum, they shall include a door panel, hanging device and latching mechanism. Performance requirements include operational, cycle, and abuse and optional security tests.

1.2 Automatic operators are permitted to be applied to the assemblies in this Standard and are required to comply with all the requirements of ANSI/BHMA A156.10 and ANSI/BHMA A156.19 based on the product type and application.

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

1.4 The tests in this Standard were selected to verify the performance and interaction of the door/frame/hardware assembly in a way not covered in their component standards.

2. DEFINITIONS

2.1 **Actuating Bar** The activating mechanism of an exit device is located on the egress side of a door. The active surface of the actuating bar shall be visually and physically distinct from the rest of the device and the length shall not be less than one-half the width of the door leaf. Refer to local codes for location and length. Also called cross bar or push pad.

2.2 **Closing Device** A means of closing a door from a partially or fully opened position.

2.3 Exit Device

2.3.1 **Panic Hardware** A door latching assembly incorporating an actuating member usually called an actuating bar which releases the latching or locking mechanisms upon the application of force in the direction of exit travel.

2.3.2 **Fire Exit Hardware** Panic Hardware which additionally provides fire protection when used as part of a fire door assembly

2.4 **Hanging Device** A device used to attach the door to the frame, and which supports the door through an opening cycle.

2.5 **Integrated Door Opening Assembly** A door panel, factory or factory authorized installed operating hardware and hanging device, combined with a frame as defined by door assembly manufacturer's specifications, and other hardware accessories required to complete the door opening.

2.6 **Labeled** Equipment or materials to which have been attached a label, symbol, or other identifying mark of an organization, that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

2.7 **Latch** A device used to hold a door closed and requiring movement of an element before the door is released for opening.

2.8 **Latching Mechanism** A mechanism that secures the door in the closed position and releases for the opening of the door.

2.9 **Non-Integrated Door Opening Assembly** A door panel, factory or factory authorized installed operating hardware and hanging device combined with a frame as defined by customer's specifications, not tested and shipped as integrated systems but rather built to order and shipped for assembly by manufacturers or their authorized distributors.

- 2.10 **Pull** Fixed hardware applied to a door and when pulled permits the user to open a door. Different shapes and mounting methods (e.g., bar extending across or vertically on a door) are employed to meet strength requirements and aesthetic preferences.
- 2.11 **Push/Pull Trim** A paddle shaped handle or actuating pad used to release the latch and open the door with body movement. This includes pushing, pulling or both operations and horizontal and vertical orientations of the actuator.
- 2.12 **Trim** The operating and non-operating elements, including levers, push/pulls, and other trim accessories, used to either release the latch mechanism, or serve as a pull or handle to open the door.
- 2.13 **Turn** The component that projects or releases a bolt or latch by turning. Sometimes called a turnpiece or thumbturn.
- 2.14 **Unlatch** To unfasten, disengage or retract a latch by movement of an element to release the door for opening.

3. GENERAL

- 3.1 Any additional products included in an integrated door opening assembly that may affect structure or operation shall be installed in the tested assembly. This includes, but is not limited to: closing devices, holders, stops, lights, louvers, electromagnetic locks, electric strikes, exit devices, coordinators, gasketing, thresholds, power transfers, power door operators and mullions.
- 3.2 Frames are permitted to be shipped and installed separately. When the frame is not specified by the manufacturer, a frame meeting A250.4 shall be used for the testing. Frames are to be installed following the manufacturer's written instructions which shall include: wall substrate, anchors (number, size, type, spacing), location and attachment of any reinforcements, location and attachment of gasketing if required, hanging devices (number, type, location and size), and location of the latching mechanism.
- 3.3 Components which comprise an Integrated Door Opening Assembly shall be installed by the manufacturer or their authorized agent.
- 3.4 Assemblies provided for life safety, fire protection and smoke barriers shall have components that have been tested and listed for use on door openings by a Nationally Recognized Testing Laboratory (NRTL) and shall be under an in-plant follow-up inspection program.
- 3.5 **Tolerances** 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 shall be ± 2 degrees. Where only minus tolerances are given, the dimensions are permitted to be exceeded at the option of the manufacturers.
- 3.6 **Reference to Other Standards.** American National Standards referenced in this Standard are available from www.buildershardware.com and the American National Standards Institute, 1430 Broadway, New York, NY 10018. ANSI/SDI A250.4-2018 Test Methods for Steel Doors, ASTM F476-2014 Standard Test Method for Security of Swinging Door Assemblies.