

The Builders Hardware Manufacturing Association
BHMA Hardware Highlights
For
ANSI/BHMA A156.22 -2017
Gasketing

ANSI/BHMA A 156.22- 2017 establishes requirements for the performance and installation of gasketing systems including intumescent applied to, or mortised to doors, frames or both. Included are performance tests intended to evaluate resistance to smoke and air infiltration, energy performance, acoustic properties, and the life and durability of gasketing materials. For further information about gasketing, consult the full standard: ANSI/BHMA A156.22 for Gasketing.

BHMA has created this series of *Hardware Highlights* to provide useful, accessible information about Builders Hardware for architects, specifiers, builders, building code officials – anyone with an interest in the devices that hang, control, secure, and trim the doors.

BHMA is the North American Trade Association, which represents almost all of the North American manufacturers of Builders Hardware. One of their main activities since 1983 has been the development and maintenance of ANSI-approved standards for 35 separate product categories.

Product Performance – purchasers of gasketing certified to A156.22 (<http://www.buildershardware.com/cpd>) can be assured their products will perform to their expectations.

Below are an explanation, some examples of the evaluations, and information included in the standard:

ADHESION	ENERGY, SMOKE, AND ACOUSTIC	INTUMESCENT	AUTOMATIC DOOR BOTTOMS
All types of gasketing are required to pass an adhesion test. Acceptable products shall reach a temperature of 160 F (71C) minimum for at least 10 minutes without slippage exceeding 1/16 in. from the original reference mark.	Gasketing can provide numerous properties that contribute to the efficiency and comfort of building. Tests are defined for energy performance, resistance to smoke infiltration, and airborne sound transmission.	There is a dedicated section in the Standard to evaluate intumescent gasketing used to prevent the spread of fire. Examples of the tests include: artificial weathering, heat exposure, and solvent and oil exposure testing.	To ensure their durability, for Grade 1 automatic door bottoms are cycled 1 million times and shall continue to operate with a maximum force of 10 lbf., and retain 90% linear contact area with the threshold.

Building Codes and Standards: Builders hardware provides many attributes that are essential to building safety and performance, including egress and fire protection. BHMA-certified gasketing is used contribute smoke control requirements such as defined in ANSI/NFPA 105 Installation of Smoke Control Doors. Increasingly, Building Standards are calling for acoustic performance to be provided, in part, with gasketing.

Sustainability: Locksets contribute to building sustainability through their verified durability, as well as material characteristics such as recycled content and recyclability. The reliable closing and sealing of openings can also contribute to energy conservation. BHMA has developed Product Category Rules, which will further define sustainability requirements and guide life cycle assessments and environmental performance declarations.

Type Numbers: Another significant contribution of standards for product specification is a numbering system for hinge types. Please consult A156.22 for the full list. Examples are provided here:

Head and jamb type, two piece interlocking.
Applied to frame stop and door face. Screw fastened. Slotted holes for adjustment.

R0Y104

R0Y105



Door sweep type. Encased in a retainer.
Applied to door face at bottom of door.
Screw fastened. Slotted holes for adjustment.

R0Y416

