



ANSI/BHMA A156.18–2006 FOR MATERIALS & FINISHES

The Standard on materials and finishes approved December 5, 2006 is the latest standard, and contains a description of types of finishes and divides them into categories. A numbering system has been established which identifies base material and finish.

The finish test methods, code numbers and finish descriptions contained in this Standard are intended to apply to the builders' hardware industry. However, the Standard is suitable for use in other industries.

1. SCOPE

This Standard establishes finish test methods and code numbers for finishes on various base materials. It includes criteria for viewing comparative finishes to the BHMA match plates and establishes five categories of finishes.

2. DEFINITIONS

- 2.1 Blackened
- 2.2 Bright
- 2.3 Coating
 - 2.3.1 Organic Coating
 - 2.3.2 Inorganic Coating
 - 2.3.2.1 Plating
 - 2.3.2.2 Oxidizing
 - 2.3.2.2.1 Anodizing (aluminum)
 - 2.3.3 Vacuum Applied Coating
- 2.4 Corrosion
- 2.6 Finish Matching
- 2.7 Relieved
- 2.8 Satin
- 2.9 Significant Surfaces
- 2.10 Stain
- 2.11 Substrate
- 2.12 Unstable Finish

3. FINISH TEST METHODS AND CRITERIA

- 3.1.1 Exempt Surfaces
- 3.1.2 Exempt Finishes
- 3.1.3 Test Specimens
- 3.2 Salt Spray Test
- 3.3 Humidity Test
- 3.4 Pencil Hardness Test
- 3.5 Perspiration Test

- 3.6 Ultraviolet Light and Condensation Test
- 3.7 Taber Abrasion Test
- 3.8 CASS Salt Spray Test

4. MATERIALS, CATEGORIES, AND FINISHES

4.1 Materials: Except for the generic classifications of materials shown, there shall be no restrictions other than those specified in the applicable ANSI/BHMS A 156 Series Standard and so long as good commercial practices are observed. The following identification numerals are used and often appear as the first numeral in the product type numbers used in individual ANSI/BHMA A 156 Series Standards and identify the predominant material from which the product is made:

- 0 Optional material
- 1 Cast, forged or extruded brass or bronze
- 2 Sheet, coil or strip brass or bronze
- 3 Cast, forged or extruded aluminum
- 4 Sheet, coil or strip aluminum
- 5 Stainless steel
- 6 Malleable iron
- 7 Cast iron
- 8 Steel
- 9 Zinc alloy

Note: All reference in this document to "bronze" shall exclude the nickel silver alloy known as "white bronze."

4.2 Categories BHMA code numbers for finishes fall into one of five categories defined as follows:

- A. Category A finishes are those that shall match BHMA match plates and are applied to the base material or are the base material defined by the description in 5.2 when viewed according to the formula in 4.3.3.
- B. Category B finishes are those that are unstable and are applied to the base material or are the base material defined by the description in 5.2. These finishes shall be compatible with the BHMA match plates, but these finishes cannot and do not match from one alloy or form of material to



the next and from one manufacturer to the next. C. Category C includes ornamental finishes that are applied to the base material defined by the description of 5.2. The material is blackened or oxidized then relieved or highlighted. D. Category D finishes are functional protective finishes and appearance is not a factor. E. Category E finishes shall be equivalent in appearance when compared with the corresponding Category A, B or C finishes. They shall be viewed using the method specified in 4.3.3.

4.3 FINISHES

4.3.1 There are separate numbers for finishes as they are applied to each separate base material except when brass or bronze is permitted to be used interchangeably without affecting the final finish, and with some painted finishes which apply to several base materials.

4.3.3 Test Methods for Finish Matching

4.3.3.1 Comparative finishes shall appear the same

To acquire CEP points, answer the following questions:

1. Under which section are the Test Methods for surface appearance described?

2. Category A Finishes are defined under Section

when viewed two feet apart and three feet away on the same relative plane.

4.3.3.2 Viewing Conditions. Place the specimen on a neutral background (middle gray to white) and illuminate it with natural or artificial daylight in 4.3.3.3.

4.3.3.3 Light Source. The artificial daylight source shall approximate the color and spectral quality of average daylight as represented by CIE illuminant D65 in accordance with ASTM D 1729-96 (2003).

5. FINISH NOMENCLATURE AND CODE NUMBERS

5.1 Finish Nomenclature Finishes shall be specified using the categories listed in 4.2. A finish designation with a letter suffix E indicates the finish code that the BHMA match plate is derived from.

5.2 Tables of Finish Description and Equivalents Refer to pages 10 through 20 of the Standard for the BHMA Code Number, Finish Description, Base Material, Category, and Nearest Former US Equivalent Charts

3. Finish Nomenclature and Code numbers are found under what section of the Standard?

4. Identify the material from which product type # 3 is made.

You will earn 3 CEP points by reading the article and answering the problems. Upon completion, copy or detach this page, fill in the form below, and submit your answers by mailing or faxing the page to DHI.



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To acquire CEP points, answer the following questions:

- | | |
|---|--|
| 1. Under which section are the Test Methods for surface appearance described?
4.3.3 | 3. Finish Nomenclature and Code numbers are found under what section of the Standard?
5 |
| 2. Category A Finishes are defined under Section?
5.2 | 4. Identify the material from which product type #3 is made.
Cast, Forged or Extruded Aluminum |



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