

SECTION 08710
DOOR HARDWARE
(DOOR BOTTOMS)

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Door Bottoms.

Specifier Note: Revise paragraph below to suit project requirements. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the paragraph below. Add section numbers and titles per CSI *MasterFormat* and specifier's practice. In the absence of related sections, delete paragraph below.

B. Related Sections:

1. Division 8 Section(s): Steel Doors, Wood Doors, Sound Control Doors, Aluminum Frame Storefront Doors.
2. Division 10 Section(s): Compartments and Cubicles, Partitions.
3. Division 13 Section(s): Special Facilities, Integrated Construction, Special Structures, Special Purpose Rooms.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard. It is a listing of all references used in this section.

1.02 REFERENCES

A. ASTM International:

1. ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
2. ASTM E1408 Standard Test Method for Laboratory Measurement of the Sound Transmission Loss of Door Panels and Door Systems.
3. ASTM E2074 Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies.

B. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):

1. ANSI/BHMA A156.18: Materials and Finishes.
2. ANSI/BHMA A156.22 Door Gasketing Systems.

C. American National Standards Institute/Steel Door Institute (ANSI/SDI):

1. ANSI A250.8/SDI-100 Recommended Specifications for Standard Steel Doors and Frames.

D. American National Standards Institute/Window and Door Manufacturers Association (ANSI/WDMA):

1. ANSI/WDMA I.S.1-A Architectural Wood Flush Doors.

E. Federal Government:

1. U.S. Architectural & Transportation Barriers Compliance Board. Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG), 1992.

2. Federal Standard FED-STD-795-1988 (Revised 1989) Uniform Federal Accessibility Standards.

F. Underwriters Laboratories, Inc. (UL):

1. UL 10B Fire Tests of Door Assemblies.
2. UL 10C Fire Tests of Door Assemblies.
3. UL 410 Slip Resistance of Floor Surface Materials.

G. International Code Council (ICC):

1. UBC 7-2 Fire Test of Door Assemblies (Positive Pressure).
2. International Building Code (IBC) Code 2000 (Positive Pressure).
3. ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities.

H. British Standards (BS):

1. BS 476 Fire Tests on Building Materials and Structures.

I. State Standards:

1. California Title 24, Part 2.

J. National Fire Protection Association (NFPA):

1. NFPA 105 Recommended Practice for the Installation of Smoke-Control Door Assemblies.

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

A. Design Requirements: Provide door bottoms which have been manufactured, fabricated and installed to meet the following design criteria:

1. For automatic door bottoms, provide components with an aluminum case which surrounds a movable drop bar seal, actuated by a plunger which contacts the jamb as door is closing, forcing drop bar seal down against floor or threshold.
2. Acoustical Performance (ASTM E90, ASTM E1408): [Specify required STC or other acoustical performance criteria.].
3. Smoke, Air Leakage: Recommended practice per NFPA 105.
4. Provide performance obtained from test procedures [UL 10B] [UL 10C] [UBC 7-2] [BS 476].

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data and installation instructions.

C. Shop Drawings: Provide drawings indicating required component locations, installation interface with adjacent materials, anchorage, fastening and similar information.

D. Samples: Submit one each of manufacturer's standard selection samples.

E. Quality Assurance/Control Submittals: Submit the following:

1. Test Reports: Upon request, submit [Fire] [Sound] [And] [Durability] test reports from recognized testing laboratory.
2. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.

F. Closeout Submittals: Submit the following:

1. Warranty documents specified herein.

Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity.

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section and authority having jurisdiction. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

B. Regulatory Requirements and Approvals: [Specify applicable requirements of regulatory agencies.].

1. [Code agency name].
 - a. [Report or approval number].

C. Certifications: [Specify requirement for certifications.].

D. Field Samples: [Specify requirement for field samples.].

E. Mock-Ups: [Specify requirements for mock-up.].

1. Subject to acceptance by owner, mock-up may be retained as part of finish work.
2. If mock-up is not retained, remove and properly dispose of mock-up.

Specifier Note: Retain paragraph below if preinstallation meeting is required.

F. Preinstallation Meetings: [Specify requirements for meeting.].

Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.

1.07 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

Specifier Note: Coordinate subparagraph below with manufacturer's warranty requirements.

1. Warranty Period: 3 years against defects in materials or workmanship, beginning with Date of Substantial Completion.

PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 DOOR BOTTOMS

Specifier Note: Paragraph below is an addition to CSI *SectionFormat* and a supplement to MANU-SPEC. Retain, edit or delete paragraph below to suit project requirements and specifier practice.

A. Manufacturer: Pemko Manufacturing Company.

1. Contact: PO Box 3780, 4226 Transport Street, Ventura, CA 93003; Telephone: (800) 283-9988, (805) 642-2600; Fax: (805) 642-4109; E-mail: pemkosales@pemko.com; website: www.pemko.com.

B. Proprietary Products/Systems: Door Bottoms, including the following:

1. Pemko Automatic Door Bottoms [Low closing force model] [Non-handed surface model] [Semi-mortise model].
 - a. Material: Extruded tempered aluminum 6063-T6.
 - b. Finish (ANSI/BHMA 156.18): [Clear anodized aluminum] [Dark bronze anodized aluminum] [Bright dip gold anodized aluminum] [Mill finish aluminum] [Cladded stainless steel] [Mill finish bronze (brass)] [Gold anodized aluminum].
 - c. Seal: [Soft closed cell sponge neoprene] [PemkoPrene thermo-plastic elastomer] [Nylon brush] [Silicone] [Vinyl].
 - d. End Plates: Provide end plates for semi-mortise models.
 - e. Manufacturer Model Number: [Specify manufacturer model number.].
2. Pemko Residential Automatic Door Bottoms:
 - a. Material: Extruded tempered aluminum 6063-T6.
 - b. Mounting Type: Surface mount with actuation button.
 - c. Height: 2 1/2 inches (64 mm).
 - d. Manufacturer Model Number: [Specify manufacturer model number.].
 - e. Seal: Vinyl.
3. Pemko Door Shoes:
 - a. Material: Extruded tempered aluminum 6063-T6.
 - b. Seal: [PemkoPrene thermo-plastic elastomer] [Vinyl].
 - c. Width: [1 1/4 inches (32 mm)] [1 5/32 inches (29 mm)] [1 3/8 inches (35 mm)] [1 3/4 inches (45 mm)].
 - d. Fasteners: Stainless steel.
 - e. Finish (ANSI/BHMA 156.18): [Mill finish aluminum] [Brass] [Bright dip clear anodized aluminum] [Bright dip gold anodized aluminum] [Dark bronze anodized aluminum] [Gold anodized aluminum] [Painted white aluminum].
 - f. Fabrication Option: [1/2 inch (12.7 mm) full notch] [1/2 inch (12.7 mm) half notch].
 - g. Manufacturer Model Number: [Specify manufacturer model number.].
4. Pemko Door Bottom Sweeps:
 - a. Material: [Extruded tempered aluminum 6063-T6] [Stainless steel] [Solid oak].
 - b. Seal: [Neoprene] [Vinyl] [Pile] [Nylon brush].
 - c. Finish (ANSI/BHMA 156.18): [Mill finish aluminum] [Mill finish bronze (brass)] [Bright dip gold anodized aluminum] [Clear anodized aluminum] [Dark bronze anodized aluminum] [Gold anodized aluminum] [Painted aluminum: {Specify color.}] [Painted dark bronze aluminum] [Painted gold aluminum] [Painted white aluminum] [Mill finish stainless steel] [Unfinished oak].
 - d. Manufacturer Model Number: [Specify manufacturer model number.].
5. Pemko Door Bottoms:
 - a. Material: Extruded tempered aluminum 6063-T6.
 - b. Seal: [Neoprene] [Vinyl].
 - c. Finish: [Specify finish.].
 - d. Manufacturer Model Number: [Specify manufacturer model number.].
6. Pemko Door Top Weatherstrip/Overhead Rain Drip:
 - a. Material: [Extruded tempered aluminum 6063-T6] [Rigid tan colored vinyl for door top or bottom insert for hollow metal doors].

- b. Insert Material: [Vinyl] [Pile].
 - c. Finish: [Specify finish].
 - d. Manufacturer Model Number: [Specify manufacturer model number].
7. Pemko Garage/Overhead Door Weatherstrip:
- a. Material: Extruded tempered aluminum 6063-T6.
 - b. Seal Material: [Neoprene] [Vinyl] [Nylon brush].
 - c. Finish (ANSI/BHMA 156.18): [Mill finish aluminum] [Bright dip gold anodized aluminum] [Dark bronze anodized aluminum] [Painted aluminum: {Specify color.}] [Mill finish bronze (brass)] [Clear anodized aluminum] [Gold anodized aluminum] [Painted white aluminum].
 - d. Manufacturer Model Number: [Specify manufacturer model number].
8. Pemko Security Door Bottoms:
- a. Material: Extruded tempered aluminum 6063-T6.
 - b. Finish (ANSI/BHMA 156.18): [Mill finish aluminum] [Mill finish bronze (brass)] [Clear anodized aluminum] [Dark bronze anodized aluminum] [Gold anodized aluminum].
 - c. Stop Bar: [Specify requirements].
 - d. Threshold: [Carpet threshold] [Half saddle threshold] [Saddle threshold] [Specify requirements].
 - e. Manufacturer Model Number: [Specify manufacturer model number].
 - f. Seal: [Nylon brush] [Extruded tempered aluminum drop bar 6063-T6].
 - g. Cam: Impact resistant injection molded Delrin.

Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

PART 3 EXECUTION

Specifier Note: Article below is an addition to the CSI *SectionFormat* and a supplement to MANU-SPEC. Revise article below to suit project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the door bottom manufacturer.

Specifier Note: Specify actions to physically determine that conditions are acceptable to receive primary products of the section.

3.02 EXAMINATION

A. Site Verification of Conditions:

- 1. Verify that site conditions are acceptable for installation of door bottoms.
 - a. Examine doors and frames for compliance with requirements for door and frame manufacturer's installation tolerances, labeled fire door assembly construction, wall and floor construction and other conditions affecting performance.
- 2. Do not proceed with installation of door bottoms until unacceptable conditions are corrected.

Specifier Note: Specify actions required to physically prepare the surface, area or site or to incorporate the primary products of the section.

3.03 PREPARATION

A. Wood Door Preparation:

- 1. Comply with ANSI/WDMA I.S.1-A.
- 2. Comply with: [Specify standard or requirements].

B. Steel Door and Frame Preparation:

1. Drill and tap doors and frames for hardware per manufacturer's installation instructions.
2. Comply with ANSI A250.8/SDI-100.
3. Comply with: [Specify standard or requirements.].

Specifier Note: Coordinate article below with manufacturer's recommended installation requirements.

3.04 INSTALLATION

A. Mounting Location: Comply with the following requirements, unless otherwise indicated:

1. Steel Doors and Frames:
 - a. Comply with ANSI A250.8/SDI-100.
 - b. Ensure doors and frames are properly sized, plumb and square.
 - c. [Specify standard or specific requirements.].
2. Wood Doors:
 - a. Comply with ANSI/WDMA I.S.1-A.
 - b. Ensure doors and frames are properly sized, plumb and square.
 - c. [Specify standard or specific requirements.].

B. Adjust and reinforce attachment substrates as necessary for proper installation and operation.

C. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant.

Specifier Note: Specify the final actions required to prepare installed equipment or other completed work to properly function or perform.

3.05 ADJUSTING

A. Perform adjustments required to ensure that door bottoms function in compliance with manufacturer's performance criteria prior to acceptance by Owner.

1. Adjust door control devices to compensate for final operation of HVAC system and to comply with accessibility requirements.

Specifier Note: Specify the final actions required to clean installed equipment or other completed work to properly function or perform. Coordinate article below with Division 1 Execution Requirements (Cleaning) Section.

3.06 CLEANING

A. Remove any protective films and clean components as necessary following manufacturer's recommended procedures.

Specifier Note: Specify provisions for protecting work after installation but prior to acceptance by Owner. Coordinate article below with Division 1 Execution Requirements Section.

3.07 PROTECTION

A. Protect installed work from damage due to subsequent construction activity on the site.

END OF SECTION