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USACE / NAVFAC / AFCEC **UFGS-08 33 13 (August 2025)**

Preparing Activity: USACE **Superseding**
UFGS-08 33 13 (May 2009)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated July 2025
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COILING COUNTER DOORS

08/25

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SECTION 08 33 13

COILING COUNTER DOORS
08/25

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NOTE: This guide specification covers the requirements for metal rolling counter doors.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

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PART 1 GENERAL

1.1 REFERENCES

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NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a Reference Identifier (RID) outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also

use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

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The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

AAMA 611	(2014) Voluntary Specification for Anodized Architectural Aluminum
AAMA 2603	(2020) Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels

ASTM INTERNATIONAL (ASTM)

ASTM A240/A240M	(2025a) Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
ASTM A653/A653M	(2023) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM B209	(2014) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM B209M	(2014) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric)
ASTM B221	(2021) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
ASTM B221M	(2021) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric)
ASTM E84	(2024) Standard Test Method for Surface Burning Characteristics of Building Materials
ASTM E90	(2023) Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
ASTM E413	(2022) Classification for Rating Sound Insulation

EUROPEAN COMMITTEE FOR STANDARDIZATION (CEN/CENELEC)

CEN EN 15804	(2012; A2 2019) Sustainability of Construction Works - Environmental Product Declarations - Core Rules for the Product Category of Construction Products

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

ISO 14025	(2006) Environmental Labels and Declarations - Type III Environmental Declarations
ISO 14040	(2006) Environmental Management Life Cycle Assessment Principles and Framework
ISO 14044	(2006) Environmental Management Life Cycle Assessment Requirements and Guidelines
ISO 21930	(2017) Sustainability In Buildings and Civil Engineering Works – Core Rules for Environmental Product Declarations of Construction Products And Services

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 80	(2025) Standard for Fire Doors and Other Opening Protectives
NFPA 252	(2022) Standard Methods of Fire Tests of Door Assemblies

U.S. GREEN BUILDING COUNCIL (USGBC)

LEED BD+C	LEED Building Design and Construction

UL SOLUTIONS (UL)

UL 10B	(2008; Reprint Oct 2024) Fire Tests of Door Assemblies
UL 723	(2018; Reprint Jun 2025) UL Standard for Safety Test for Surface Burning Characteristics of Building Materials
UL 1784	(2015; Reprint Jan 2025) UL Standard for Safety Air Leakage Tests of Door Assemblies and Other Opening Protectives

1.2 SYSTEM DESCRIPTION

Provide coiling counter doors of the type, size, and design indicated on the drawings. Provide the standard product of a manufacturer regularly engaged in the production of coiling counter doors. Provide each door with a permanent label showing the manufacturer's name and address and the model number of the door.

1.3 SUBMITTALS

****

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list, and corresponding submittal items in the text, to reflect only the submittals required for the project. The Guide Specification technical editors have classified those items that require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item, if the submittal is sufficiently important or complex in context of the project.

For Army projects, fill in the empty brackets following the "G" classification, with a code of up to three characters to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy and Air Force projects.

The "S" classification indicates submittals required as proof of compliance for sustainability Guiding Principles Validation or Third Party Certification and as described in Section 01 33 00 SUBMITTAL PROCEDURES.

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Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Coiling Counter Doors (Non-Rated); G, [_____]

Fire-Rated Coiling Counter Door; G, [_____]

Integral Frame Coiling Counter Door; G, [_____]

Detail Drawings; G, [_____]

SD-03 Product Data

Coiling Counter Doors (Non-Rated); G, [_____]

Fire-Rated Coiling Counter Door; G, [_____]

Integral Frame Coiling Counter Door; G, [_____]

Warranty

SD-04 Samples

Coiling Counter Doors (Non-Rated); G, [_____]

Fire-Rated Coiling Counter Door; G, [_____]

Integral Frame Coiling Counter Door; G, [_____]

SD-07 Certificates

Installer Qualifications; G, [_____]

Oversized Fire-Rated Door Assembly Certification; G, [_____]

SD-09 Manufacturer's Field Reports

Field quality control report

SD-10 Operation and Maintenance Data

Coiling Counter Doors (Non-Rated), Data Package 2; G, [_____]

Fire-Rated Coiling Counter Door, Data Package 2; G, [_____]

Integral Frame Coiling Counter Door, Data Package 2; G, [_____]

SD-11 Closeout Submittals

Environmental Product Declaration (EPD); S

1.4 QUALITY ASSURANCE

Submit Detail Drawings showing elevations of each door type, details of anchorage, details of construction, location and description of hardware, shape and thickness of materials, details of joints and connections, and details of guides and fittings. Include a schedule showing the location of each counter door with the drawings.

1.4.1 Installer Qualifications

Installer who is trained and approved by the manufacturer for installation[and maintenance] of coiling counter doors required for this project.

1.5 DELIVERY, STORAGE, AND HANDLING

Deliver coiling counter doors to the project site wrapped in a protective covering with the brands and names clearly marked thereon. Store doors in accordance with the manufacturer's instructions in a dry location that is adequately ventilated and free from dust, water, or other contaminants, and in a manner that permits easy access for inspecting and handling. Handle doors carefully to prevent damage. Replace damaged items that cannot be restored to like-new condition.

1.6 WARRANTY

Provide manufacturer's standard performance guarantees or warranties that extend beyond a one year period. Submit no later than 30 days prior to final inspection.

PART 2 PRODUCTS

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NOTE: Use the paragraphs below when Third Party Certification (TPC), such as LEED or Green Globes® criteria, is specified in Section 01 33 29 SUSTAINABILITY REPORTING.
****

[2.1 SUSTAINABLE DESIGN REQUIREMENTS

See Section 01 33 29 SUSTAINABILITY REPORTING for sustainable design[and][LEED BD+C][Green Globes] requirements.

[2.1.1 Environmental Product Declaration (EPD)

Provide independently verified Environmental Product Declaration (EPD) which conform to ISO 14025, ISO 14040, ISO 14044 and CEN EN 15804 or ISO 21930 in accordance with the requirements of Section 01 33 29 SUSTAINABILITY REPORTING.

]]2.2 PERFORMANCE REQUIREMENTS

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NOTE: Select project-specific items.
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2.2.1 Counter Door Type

Coiling counter door formed with curtain of interlocking metal slats.

2.2.2 Operation Cycles

Door components and operators capable of opening up to 20 cycles a day with minimum life time cycles of 50,000. When door is opened from the closed position to the fully open position and returned to the closed position equals one operation cycle.

[2.2.3 Fire-Rated Door Assemblies

Complying with NFPA 80. Listed and labeled by a qualified testing agency for fire-protection ratings[indicated on the drawings,][specified herein,] based on testing in accordance with[NFPA 252][or][UL 10B].

[2.2.3.1 Oversized Fire-Rated Door Assembly

For door fire-rated door assemblies that exceed size limitations of labeled assemblies, submit certification by a qualified testing agency that doors comply with standard requirements for labeled assemblies, except for size. Doors over 120 square feet or over 10 foot in height will be a full size model.

][2.2.3.2 Temperature-Rise Limit

Where indicated, [and as required], provide doors that have a maximum transmitted temperature end point of not more than specified temperature-rise limit above ambient after 30 minutes of standard fire-test exposure.

][2.2.3.3 Smoke Control

Where indicated, [and as required,] provide doors that are listed and labeled with the letter "S" on the fire-rating label by a qualified testing agency for smoke-control and draft-control based on testing according to UL 1784; with maximum air-leakage rate of 3.0 cfm/square feet (0.01524 cu. m/s by square meters) of door opening at 0.10 inch wg(24.9 Pa) for both ambient and elevated temperature tests.

][2.2.3.4 Fire Rating

[As indicated on drawings.][Class A (3 hour-)] [Class B (1-1/2 hour-)] [Class C (3/4 hour-)] [Class D (1-1/2 hour-)] rated.

[a. Temperature-Rise Limit:[250 degrees F139 degrees C.] [450 degrees F 250 degrees C.] [650 degrees F 361 degrees C.] [non-temperature rise rating.]]

]][2.2.4 Sound-Rated Doors

Tested assemblies in a laboratory in accordance with ASTM E90 requirements, calculated in accordance with ASTM E413 requirements, and rated for not less than the STC rating [indicated on the drawings][specified herein].

2.2.4.1 Sound Rating

STC rating of [26][_____].

]2.3 BASIC COMPONENTS

2.3.1 Curtain

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NOTE: Standard non-rated coiling counter doors may be constructed of aluminum, steel or stainless steel. Fire rated coiling counter doors to be constructed of steel or stainless steel.

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Fabricate the curtain of [extruded aluminum slats conforming to ASTM B221M ASTM B221, Alloy 6063] [0.759 mm 22 gauge stainless steel slats conforming to ASTM A240/A240M, Type 304 or Type 430] [or] [0.853 mm 22 gauge galvanized steel slats conforming to ASTM A653/A653M, Coating Designation [G60] [G90]]. Provide thickness of slat material as required by width of opening [or as required by specified fire-rating]. Use slats approximately 32 to 38 mm 1-1/4 to 1-1/2 inch wide with a depth of crown of 13 mm 1/2 inch. Fit alternate slats with endlocks to maintain curtain alignment. Provide bottom of curtain with angle or tubular bar reinforcement matching the curtain, and fitted with a resilient bottom seal.

2.3.2 Jamb Guides

Provide guides of [3 mm 1/8 inch minimum thickness extruded aluminum conforming to ASTM B221M ASTM B221, Alloy 6063, and fitted with neoprene silencers or replaceable heavy nap striping to eliminate noise and dust infiltration.] [2.372 mm 13 gauge minimum thickness stainless steel conforming to ASTM A240/A240M, Type 304 or Type 430.] [2.278 mm 13 gauge minimum thickness galvanized steel angles conforming to ASTM A653/A653M, Coating Designation minimum G40.]

2.3.3 Counterbalance Shaft Assembly

Provide the curtain coiled around a steel tube of sufficient thickness and diameter to prevent deflection exceeding 2.5 mm per meter 0.03 inch per foot. Provide a barrel containing oil tempered helical steel torsion springs capable of sufficient torque to counterbalance the weight of the curtain.

2.3.4 Brackets

Provide brackets of a minimum 2.657 mm 12 gauge thickness steel if flat plate, or 1.519 mm 16 gauge thickness if there are a minimum of 3 returns of 19 mm 3/4 inch width.

2.3.5 Hood

Provide a hood of [1.02 mm 0.040 inch minimum thickness aluminum sheet conforming to ASTM B209M ASTM B209M ASTM B209, Alloy 5005.] [0.607 mm 24 gauge stainless steel conforming to ASTM A240/A240M, Type 304 or Type 430.] [0.701 mm 24 gauge galvanized steel conforming to ASTM A653/A653M, Coating Designation minimum G40.]

2.3.6 Insulation

Fill slats for insulated doors with manufacturer's standard thermal insulation complying with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E84 or UL 723. Enclose insulation completely within slat faces to match metal of exterior curtain-slat face.

****

NOTE: Specified locking options are for manual operated coiling counter doors only. The industry generally discourages using slide-bolt locks or cylinder locks on power operated coiling counter doors because of the possibility of damaging the motor and drive system; therefore, the preferred method for locking a power operated coiling counter door is relying on the motor's gearing and braking resistance only. If specified locking options are required by the Using Agency for power operated coiling counter doors, then specify the option to equip the power operator with safety interlock switch to disengage power supply when door is locked.

****

2.3.7 Locks

[2.3.7.1 Manual Operated Doors

Lock the door curtain at [each side of the bottom bar by an integral slide bolt] [both sides of bottom bar by a chrome-plated cylinder lock keyed into the building keying system]; locate lock on the [_____] side of the counter door; provide keying [in accordance with Section 08 71 00 DOOR HARDWARE] [as indicated].[Lock the curtain with chain lock keeper suitable for padlock.]

]2.3.7.2 Power Operated Doors

[Rely on motor's gearing and braking resistance only; additional locks are not required.][Equip power operated doors with safety interlock switch to disengage power supply when door is locked].

2.4 COILING COUNTER DOORS (NON-RATED)

Construct coiling counter doors, curtains, guides and hood components of [aluminum] [stainless steel] [galvanized steel] conforming to the requirements specified herein.

Submit manufacturer's descriptive product data for each coiling counter door type. Include profiles for slats and finishes. Include [fire-rated] [and] [sound- rated] [capacities,] [and] operating characteristics[.] [,] and electrical characteristics. Include description of automatic closing devices.

2.5 FIRE-RATED COILING COUNTER DOOR

Provide fire-rated coiling counter doors, conforming to the requirements for the class [specified herein]. [indicated on the drawings]. The construction details necessary for labeled coiling counter doors take precedence over details indicated or specified herein. Provide door curtains, guides and hood of [stainless steel] [galvanized steel]. Provide fire-rated coiling counter doors complete with hardware, accessories, and automatic closing device. Provide coiling counter doors, in exit corridor walls, with perimeter smoke and draft control gasketing.

2.6 INTEGRAL FRAME COILING COUNTER DOOR (RATED OR NON-RATED)

Provide integral frame coiling counter door of [[aluminum] [stainless steel] [galvanized steel].] [[[Class A (3 hr.)] [Class B (1-1/2 hr.)] [Class C (3/4 hr.)] [Class D (1-1/2 hr.)]] [as shown], [stainless steel] [galvanized steel].] Conform fire-rated doors to the requirements of NFPA 80 for the Class indicated and bearing the labels of a recognized testing agency indicating the applicable fire resistance rating. Form jambs to create guides for the curtain. Provide head and jambs of 1.519 mm 16 gauge thickness. Provide counter of 1.897 mm 14 gauge thickness. Provide coiling counter doors, in exit corridor walls, with perimeter smoke and draft control gasketing.

2.7 OPERATION

[2.7.1 Manual Operation

Provide curtain operated by means of [manual push-up with lift handles or continuous full width lift bar] [manual crank with removable handle].

]2.7.2 Power Operation

Provide a high-starting torque, reversible type motor of sufficient power and torque output to move the door in either direction from any position at the required speed. Provide power operator with an emergency push-up operation, limit switch, three-button type control marked "OPEN", "CLOSE", and "STOP".

2.7.2.1 Operator Location

[Top of hood.][Front of hood.][As indicated on drawings.]

2.7.2.2 Motor Exposure

[Interior.][Exterior, wet and humid.]

2.7.2.3 Usage Classification

[Heavy duty.] [Standard duty.] [Medium duty.] [Light duty.]

2.7.2.4 Motor Electrical Characteristics

a. Horsepower: [1/2 hp.] [1 hp.] [2 hp.] [3 hp.] [Manufacturer's standard to suit conditions.]

[b. Voltage: [115 volts ac,][[_____] volts ac,][single phase, 60 Hz.] [As indicated on Electrical drawings.]

][c. Voltage: [208 volts ac,][[_____] volts ac ,][three phase, 60 Hz.] [As indicated on Electrical drawings.]
]
2.7.2.5 Obstruction-Detection Device

Manufacturer's standard automatic [electric sensor edge on bottom bar.] [photoelectric sensor.] [pneumatic sensor edge on bottom bar.] Sensor edge bulb color will be black.

2.8 AUTOMATIC CLOSING DEVICE

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NOTE: Activation of the automatic closing device on fire-rated coiling counter doors will be by the building's fire alarm system or smoke/heat detector system when coiling counter doors are located in smoke barriers and fire barriers, or where life safety would be endangered by fire and smoke if the doors were left open. Fusible link devices will only be used in those areas where protection of property from fire is the only consideration, unless otherwise required.
****

Equip fire-rated counter doors with an automatic closing device which operates upon[the fusing of a 74 degrees C 165 degree F fusible link][activation of the building's][fire alarm system][or][smoke alarm system] [and][heat detector system]. Provide fire-rated counter doors that easily reset by the facility user after they have been released by the detection system. Resetting the door will not require the use of special tools.

2.9 FINISH

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NOTE: Select project-specific finishes for Aluminum or Steel and Galvanized Steel or Stainless-Steel.
****

Submit manufacturer's standard sized samples for verification of each exposed factory-applied finish to validate color compliance.

2.9.1 Aluminum

[2.9.1.1 Mill Finish

Manufacturer's standard.

][2.9.1.2 Clear Anodic Finish

AAMA 611, [AA-M12C22A41, Class I, 0.018 mm] [AA-M12C22A31, Class II, 0.010 mm] or thicker.

][2.9.1.3 Color Anodic Finish:

AAMA 611, [AA-M12C22A42/A44, Class I, 0.018 mm] [AA-M12C22A32/A34, Class II, 0.010 mm] or thicker. Color [in accordance with Section 09 06 00 SCHEDULES FOR FINISHES.] [as indicated; colors listed are not intended to limit the selection of equal colors from other manufacturers.]

][2.9.1.4 Baked-Enamel or Powder-Coat Finish

AAMA 2603. Color [in accordance with Section 09 06 00 SCHEDULES FOR FINISHES.] [as indicated; colors listed are not intended to limit the selection of equal colors from other manufacturers.]

]2.9.2 Steel and Galvanized-Steel

[2.9.2.1 Prime Finish

Manufacturer's standard primer, compatible with field-applied finish. [Finish painting in accordance with Section 09 90 00 PAINTS AND COATINGS.]

][2.9.2.2 Baked Enamel or Powder-Coat Finish

Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Color [in accordance with Section 09 06 00 SCHEDULES FOR FINISHES.] [as indicated; colors listed are not intended to limit the selection of equal colors from other manufacturers.]

][2.9.3 Stainless-Steel

[2.9.3.1 Polished Finish

Grind and polish surfaces to produce uniform finish, free of cross scratches. Directional Satin Finish, No. 4.

][2.9.3.2 Bright, Cold-Rolled, Unpolished Finish

No. 2B.

]]PART 3 EXECUTION

3.1 INSTALLATION

Install doors in accordance with approved detail drawings and manufacturer's instructions. Accurately locate anchors and inserts for guides, brackets, hardware, and other accessories. Upon completion, warped, twisted, or distorted doors are not acceptable. Lubricate, properly adjust, and demonstrate doors to operate freely. Conform fire-door installation with NFPA 80 for the class indicated and the manufacturer's instructions.

3.2 OPERATION

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NOTE: Rolling counter doors over 3050 mm 10 feet wide, or where the interior counter is over 380 mm 15 inches deep, may use manual crank operation or electric operation.
****

3.2.1 Manual Operation

Provide curtain operated by means of [manual push-up with lift handles or continuous full width lift bar] [manual crank with removable handle].

3.2.2 Power Operation

Provide a high-starting torque, reversible type motor of sufficient power and torque output to move the door in either direction from any position at the required speed. Provide power operator with an emergency push-up operation, limit switch, three-button type control marked "OPEN", "CLOSE", and "STOP".

3.3 INSTALLATION

Install doors in accordance with approved detail drawings and manufacturer's written instructions. Accurately locate anchors and inserts for guides, brackets, hardware, and other accessories. Upon completion, doors to be free from warp, twist, or distortion. Lubricate, properly adjust, and demonstrate doors to operate freely. Conform fire-door installation with NFPA 80 for the class indicated and the manufacturer's instructions.

3.4 FIELD QUALITY CONTROL

Engage a factory-authorized service representative to perform the following in the presence of the Installer and the Contracting Officer.

Complete installation and startup according to manufacturer's written instructions.

Test door closing when activated by automatic closing device. Reset door automatic closing device after successful test.

Test and adjust controls and safety devices. Replace malfunctioning controls and equipment.

3.5 ADJUSTING AND CLEANING

Clean aluminum and stainless steel doors in accordance with manufacturer's written instructions.

Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion. Lubricate bearings and sliding parts as required in accordance with manufacturer's written instructions.

-- End of Section --