
USACE / NAVFAC / AFCEA / NASA UFGS-08 34 53 (August 2008)

Preparing Activity: USACE Superseding
UFGS-08 34 53 (April 2006)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2010

SECTION TABLE OF CONTENTS

DIVISION 08 - OPENINGS

SECTION 08 34 53

SECURITY DOORS AND FRAMES

08/08

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY, STORAGE, AND HANDLING

PART 2 PRODUCTS

- 2.1 VAULT DOOR UNIT
- 2.2 Doors
- 2.3 Frames and Sills
- 2.4 Day Gate

PART 3 EXECUTION

- 3.1 INSTALLATION

-- End of Section Table of Contents --

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SECTION 08 34 53

SECURITY DOORS AND FRAMES 08/08

NOTE: This guide specification covers the requirements for non-security type fire-insulated record-vault doors.

Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable items(s) or insert appropriate information.

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

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a Criteria Change Request (CCR).

PART 1 GENERAL

1.1 REFERENCES

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 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.

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.

UNDERWRITERS LABORATORIES (UL)

UL 140	(2006; Rev thru Jan 2008) Standard for Relocking Devices for Safes and Vaults
UL 155	(2005) Standard Tests for Fire Resistance of Vault and File Room Doors
UL 768	(2006; Rev thru Mar 2007) Standard for Combination Locks

1.2 SUBMITTALS

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation 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, Air Force, and NASA projects.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.] [information only. When used, a designation following the "G" designation 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

Vault Door Unit
Doors
Day Gate
Frames and Sills
Hardware

Installation drawings which include details of construction, method of anchorage and type and location of the following: Vault Door Units, Hardware, Frames and Sills, and Day Gate

SD-03 Product Data

Vault Door Unit
Doors
Day Gate
Frames and Sills

Manufacturer's descriptive data and catalog cuts. Preprinted installation instructions.

SD-07 Certificates

Vault Door Unit
Frames and Sills
Hardware

Certificates attesting that the vault-door unit, frames, sills, and hardware furnished under this specification conform with the referenced standards contained in this section and to the requirements of the Underwriters Laboratories. The label or listing of the Underwriters Laboratories, for fire-resistance classification and safety-relocking devices is acceptable as sufficient evidence that the vault-door unit conforms to these requirements. In lieu of such label or listing, submit a written certificate from any nationally recognized testing agency adequately equipped and competent to perform such services, stating that the vault-door unit has been tested and that this unit conforms to the requirements listed herein, including methods of testing of the Underwriters Laboratories, Inc.

1.3 DELIVERY, STORAGE, AND HANDLING

Deliver, store and handle doors and frames in a manner that prevents damage.

PART 2 PRODUCTS

2.1 VAULT DOOR UNIT

Provide an insulated, steel, flat-sill, record-vault-type door with frame that is a standard product of a manufacturer specializing in this type of

construction.

2.2 Doors

NOTE: When the required clear opening for the door is in excess of 1000 mm (40 inches) in width, a pair of doors must be used.

Design and construction of doors shall be manufacturer's standard with a **UL 155** fire-resistant classification for a [6-hour] [4-hour] [2-hour] exposure rating, bearing the UL label on the door and frame for the exposure rating required. Provide doors of the size indicated. The finish for door, frame, and hardware shall be the manufacturer's standard for the type door indicated. Provide each door equipped with a relocking device conforming to **UL 140** and with an inner escape device that permits the bolt work to be released from inside the vault. [Escape mechanism to be panic bar type or other approved type requiring no tools or special instructions for operation.] [Printed instructions for operating the escape device shall be provided inside the vault near the escape device release.] **Hardware** shall meet the following specifications:

- a. Provide [not less than 5 bolts for the door] [five bolts for each side of the door]. Each bolt shall be not less than **17 mm 11/16 inch** in diameter, permanently lubricated. When the bolts are not located on both jamb sides of the door, the jamb side not provided with bolts shall interlock with the frame walls of that side. Exposed bolt work shall be corrosion resistant or nickel plated steel.
- b. Provide each door with not less than three heavy, offset roller or ball bearing steel hinges, unless noted otherwise on the drawings.
- c. Each door shall have a combination lock that complies with **UL 768**, Group 1R, for combination locks. Provide locking mechanism operated by means of a lever handle. Locks shall be combination 3 or 4 tumbler, key or hand-changing type with metal cases protected by drill-resistive steel plates and operated by lever handles. The front-plate of the doors shall be not lighter than **1.5 mm 0.060 inch** steel plate either riveted or welded to the edge plates. Edge plates and back plates of doors shall be not lighter than **0.81 mm 0.032 inch** steel. Lock shall be [highly resistant to expert manipulation conforming to **UL 768**, Group I, combination locks.][reasonably resistant to unauthorized opening conforming to Group II of **UL 768** combination locks.]

2.3 Frames and Sills

Provide frames of the tongue-and-groove interlocking type, constructed of not lighter than **1.2 mm 0.0478 inch** cold-formed steel, formed from a single length for each jamb and a single length for the head. Head and jambs shall be continuously welded along the entire intersection. Sills shall be flat and not less in width than the jambs. Provide frame, jambs and heads insulated with the same material as the door. The frame shall be designed for the thickness of vault wall indicated.

2.4 Day Gate

NOTE: If no day gate is required, omit this

paragraph in its entirety.

The vault door unit shall include a day gate of the manufacturer's standard make, and the door frame designed to accommodate this day gate. The gate shall be of the swing-in, hinged type, with not less than 15 mm 5/8 inch diameter rods, and the gate frame of not less than 10 mm 3/8 inch by 31 mm 1-1/4 inch aluminum or steel members. Provide the day gate equipped with a locking device arranged to permit locking and unlocking of the gate[from the inside only]. Finish of the day gate shall be the manufacturer's standard. The day gate shall not interfere with the operation of the inner escape device.

PART 3 EXECUTION

3.1 INSTALLATION

NOTE: If carpet is to be installed in front of the door, increase the height of the wall opening by the combined thickness of the carpet and pad.

Install the vault door unit in strict compliance with the approved installation instructions and drawings provided by the manufacturer. [Install the day gate in a manner that does not interfere with operation of the release handle on the inside of the vault door.] After installation, adjust the door, the locking mechanism, and the inner escape for proper operation.

-- End of Section --