SECTION 083459 - VAULT DOORS AND DAY GATES

Revise this Section by deleting and inserting text to meet Project-specific requirements.

1. GENERAL
	* + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			1. SUMMARY
				1. Section Includes:

Burglary-resistance-rated vault door assemblies.

Fire-resistance-rated vault door assemblies.

* + - 1. PREINSTALLATION MEETINGS

Retain "Preinstallation Conference" paragraph below if Work of this Section is extensive or complex enough to justify a conference.

* + - * 1. Preinstallation Conference: Conduct conference at [**Project site**] <**Insert location**>.
			1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: For each type of product.

Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for vault door assemblies.

* + - * 1. Shop Drawings: For vault door assemblies.

Include plans, elevations, sections, and attachment details.

Show operational clearances and coordination of frame with designed wall thicknesses.

Show installation of anchorages for vault door frames.

* + - * 1. Setting Drawings: For anchorages, including sleeves, inserts, anchor bolts, and items with integral anchors that are to be embedded in supporting construction.

Retain "Samples" paragraph below for single-stage Samples, with a subordinate list if applicable. Retain "Samples for Initial Selection" and "Samples for Verification" paragraphs for two-stage Samples.

* + - * 1. Samples: For each exposed product and for each color and texture specified, in manufacturer's standard sizes.
				2. Samples for Initial Selection: For each type of exposed finish.

Include Samples of hardware and accessories involving color and finish selection.

* + - * 1. Samples for Verification: For each type of exposed finish, in manufacturer's standard sizes.

Include Samples of hardware and accessories to verify color and finish selection.

* + - * 1. Product Test Reports: For each vault door, for tests performed by a qualified testing agency.
			1. CLOSEOUT SUBMITTALS
				1. Operation and Maintenance Data: For vault door assemblies to include in emergency, operation, and maintenance manuals.

Include the following:

Keying and combination information.

<**Insert requirements**>.

* + - 1. QUALITY ASSURANCE
				1. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

Revise "Maintenance Proximity" subparagraph below to suit Project.

Maintenance Proximity: Not more than [**2**] <**Insert number**> hours' normal travel time from Installer's place of business to Project site.

* + - * 1. Sample warranties.
			1. DELIVERY, STORAGE, AND HANDLING
				1. Deliver vault door assemblies wrapped and crated to provide protection during transit and Project-site storage. Use vented plastic.
				2. Deliver keys to the Director’s Representative by registered mail or overnight package service.
			2. FIELD CONDITIONS
				1. Environmental Limitations: Do not deliver or install vault door assemblies until spaces are enclosed and weathertight, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at levels intended for building occupants during the remainder of the construction period.
1. PRODUCTS

Manufacturers and products listed in SpecAgent and MasterWorks Paragraph Builder are neither recommended nor endorsed by the AIA or Deltek. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications.

* + - 1. BURGLARY-RESISTANCE-RATED VAULT DOOR ASSEMBLIES
				1. Vault Door Assembly: Tested according to UL 608 and listed and labeled for burglary-resistance ratings indicated by a qualified testing agency.
				2. Burglary-Resistance Rating: UL 608, [**Class M, 15 minutes**] [**Class 1, 30 minutes**] [**Class 2, one hour**] [**Class 3, two hours**] net working time.
				3. Door: Jambs and head shaped to interlock with frame and with full-height, stainless-steel locking bar that engages vertical jambs.

Clear Opening Size: [**36 inches wide by not less than 78 inches high** [**52 inches wide by not less than 78 inches high**] [**As indicated on Drawings**] <**Insert dimensions**>.

Factory-Installed Features:

Revise list below to suit Project. Below may be optional features or unavailable for some vault door assemblies, depending on rating. Verify availability with manufacturers.

Door-contact alarm device.

Heat detector.

Emergency vault ventilator complying with UL 680, with same burglary classification as vault door.

Pass-through port.

In-door telephone jack.

Stainless-steel back panel to conceal timelock.

Can be side lifted.

<**Insert feature**>.

* + - * 1. Frame: Designed for [**nongrout**] [**grouted**] installation; adjustable to accommodate wall thicknesses.
				2. Hardware and Accessories:

Hinges: [**Manufacturer's standard**] <**Insert hinge requirements**>.

Handle: [**Manufacturer's standard**] [**Stainless-steel, spoked wheel**] [**Stainless-steel hand wheel with rubber-grip perimeter**] <**Insert handle**>.

Combination Locks: UL 768, Group 1, four-wheel mechanical type capable of no fewer than one million possible combinations.

Quantity: [**Two**] [**Three**] per door.

Timelock: UL 887 listed, three-movement, [**144**] [**199**]-hour timelock.

Day Guard Lock: Secures locking bar in open position to prevent lock in of personnel.

Sills: [**Manufacturer's standard**] <**Insert sill**>.

Door Stop: [**Tube-and-bumper**] [**Low-profile**] style.

Trim: Stainless-steel, chromium-plated steel, or other trim standard with vault door manufacturer.

* + - * 1. Day Gate: Full width of door opening and designed to restrict entry through vault door; with piano-type or self-closing gravity hinges.

Construction: [**Manufacturer's standard**] [**Stainless-steel frame with tempered glass**] [**Vertical, stainless-steel bar grille**] [**Vertical, clear-anodized aluminum bar grille**] [**Clear acrylic**] <**Insert construction**>.

Lock: Cylinder-type lock, controlled by key on nonsecure side and by knob on secure side.

Features:

Deal window.

Automatic closure.

<**Insert feature**>.

* + - * 1. Finish: Manufacturer's standard [**stainless-steel clad**] [**factory-applied, baked-on coating**] <**Insert finish**> finish applied to door, frame, and wall flanges.

Retain "Color" subparagraph below for baked-on coatings. Manufacturers' standard colors are typically neutral grays and tans.

Color: [**As indicated by manufacturer's designations**] [**Match Approved sample**] [**As selected by the Director’s Representative from manufacturer's full range**] <**Insert color**>.

* + - 1. FIRE-RESISTANCE RATED VAULT DOOR ASSEMBLIES
				1. Vault Door Assembly: Complying with NFPA 232, tested according to UL 155, and listed and labeled for fire-resistance ratings indicated by a qualified testing agency.
				2. Fire-Resistance Rating: UL 155, Class 350, [**2**] [**4**] [**6**] hours.
				3. Door: Fabricated from all-welded, insulated steel sheet construction; with jambs and head shaped to interlock with frame.

Clear Opening Size: [**32 inches wide by 78 inches high**] [**40 inches wide by 78 inches high**] [**As indicated on Drawings**].

* + - * 1. Frame: Fabricated from steel sheet and designed for nongrout installation; adjustable to accommodate wall thicknesses.
				2. Hardware and Accessories:

Hinges: No fewer than three roller-thrust-bearing hinges of design, size, and weight required for smooth operation of door and to allow full, clear door opening; with hinge cover(s).

Hinge Cover: [**Manufacturer's standard**] [**Stainless steel**].

Door Bolts: Permanently lubricated, not less than 11/16 inches in diameter, and fabricated from nickel-plated steel. On each vertical side of door, provide five door bolts that engage frame when extended. Bolts automatically retract when handle is operated and automatically extend when door closes.

Handle: Manufacturer's standard.

Combination Lock: UL 768, Group 2, three-wheel, mechanical type, capable of not less than one million possible combinations.

Key locking dials are optional feature. Gaining access to the vault requires the lock combination and the key.

Provide key locking dials.

Relocking Device: UL 140 separate relocking device that automatically deadlocks door bolts when lock is subjected to mechanical attack.

Escape Mechanism: Provide emergency operation of lock from vault side of door.

Door Closer: Automatic, with electromagnetic system and sensor that releases door on detection of heat or smoke; with 180-degree, hold-open position.

Sill: Reinforced formed- or flat-steel plate.

Trim: Stainless-steel, chromium-plated, or other trim standard with door manufacturer.

Diebold day gates are aluminum bar grilles. SentrySafe day gates are polycarbonate with clear anodic-finished aluminum vertical edges.

* + - * 1. Day Gate: Manufacturer's standard gate; full width of door opening and designed to restrict entry through vault door; with piano-type or self-closing gravity hinges.

Lock: Equip gate with cylinder-type lock, controlled by key on nonsecure side and by lever on secure side.

* + - * 1. Painted Finish: Manufacturer's standard factory-applied, baked-on coating applied to vault door, frame, and wall flanges.

Manufacturers' standard colors are typically neutral grays and tans. Verify availability of custom colors.

Color: [**As indicated by manufacturer's designations**] [**Match Approved sample**] [**As selected by the Director’s Representative from manufacturer's full range**] <**Insert color**>.

1. EXECUTION
	* + 1. EXAMINATION
				1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
				2. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
				3. Proceed with installation only after unsatisfactory conditions have been corrected.
			2. PREPARATION
				1. Coordinate size and location of vault door assemblies with supporting construction, and furnish anchoring devices with templates, diagrams, and instructions for their installation.
				2. Provide temporary shoring or bracing of floors while transporting vault door assemblies to final location as required to prevent surface damage to floors or deflection in excess of design loads.
			3. INSTALLATION
				1. Install vault door assemblies complete with doors, frames, and accessories and according to requirements of assemblies' UL listing.
				2. Set vault door frames accurately in position; plumb, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.
			4. ADJUSTING AND CLEANING
				1. Adjust vault door hardware and operating mechanism to function smoothly, and lubricate as recommended by manufacturer.
				2. Remove and replace work that cannot be cleaned and repaired to permanently eliminate evidence of damage, including dented and bent units.

Retain "Touchup Painting" paragraph below for vault door assemblies with baked-on coatings.

* + - * 1. Touchup Painting: Immediately after erection, clean abraded areas of shop paint; paint exposed areas with same material used for shop painting.

Comply with [**SSPC-PA 1 for touching up shop-painted surfaces.**] [**Section 099123 "Interior Painting."**]

END OF SECTION 083459