

SECTION 13 9110 – MODULAR VAULT SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes prefabricated modular concrete panel vault system and vault door.
 - 1. Note: Vault is to be painted inside and out, coordinate with paint and preparation requirements.
- B. Related Sections include the following:
 - 1. Division 9 Section "Painting" for painting vault system - exterior and interior.
 - 2. Division 15 Sections for HVAC systems and connections to modular vault.
 - 3. Division 16 Sections for electrical wiring, communication wiring, alarm wiring and connections for modular vault.

1.3 PERFORMANCE REQUIREMENTS

- A. Modular Vault Performance: Provide modular concrete panel vault system that complies with:
 - 1. General Services Administration (GSA) Rated Panels - Federal Specification AA-V-2737.
- B. Vault Door Performance: Provide vault door that complies with:
 - 1. GSA Security Class-5 for armory installation.

1.4 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for vault.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Assurance/Control Submittals:
 - 1. Test Reports: Underwriters Laboratories Incorporated (UL) approval for type 608 Class M vault panels.
 - 2. GSA Rated Vault Panels - Federal Specification AA-V-2737.
 - 3. (GSA) security Class 5 standards for vault door.

- D. Field Painting Assurance: General Contractor to submit painting schedule indicating paint and number of coats for modular vault system.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain modular vault through one source from a single manufacturer.
- B. Product Options: Information on Drawings and in Specifications establishes requirements for system's performance characteristics.
- C. Welding: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1, "Structural Welding Code--Steel."
- D. Preinstallation Conference: Conduct conference at Project site with Department of Military Affairs CFMO representative, local armory personnel, representatives of Mechanical and Electrical trade subcontractors and general contractor prior to installation.
 - 1. General Contractor to conduct and record meeting via minutes of meeting and distribute to all attendees and architect.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of walls, columns, and other construction contiguous with modular vault by field measurements before fabrication and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. Basis-of-Design Product: The design for type of modular vault indicated is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

2.2 MODULAR VAULT, GENERAL

- A. General: Provide a complete, integrated set of manufacturer's standard, mutually dependent components that form a completely assembled, prefabricated concrete panel modular vault, ready for installation on Project site. Include structural framing, roof and wall panels, door(s), and accessories complying with requirements indicated.
 - 1. Vault Standard: Meeting GSA Rated Panels - Federal Specification AA-V-2737.

2. Doors: Standard meeting GSA Security Class 5 standards for armory installation.

B. Lighting Fixtures: Provided for under Division 16 Electrical Specifications.

2.3 MODULAR VAULT AND DOOR SYSTEM

1. Basis-of-Design Product: Custom Vault Corporation; Type II GSA Rated Panels - Federal Specification AA-V-2737 prefabricated concrete panel modular vault.

B. Vault Panel System: Modular interlocking cast concrete vault system consisting of 4" thick concrete panels for slab on grade installation.

1. Utility Entrances: Provide three junction boxes with six conduits through ceiling panel or at location as required by vault manufacturer. General Contractor to provide three junction boxes for access conduit. Manufacturer and General Contractor and Electrical Sub-contractor to verify all penetrations shown on the vault system so as to provide complete system prior to fabrication.

2. Ventilation: Provide ventilating system penetrations meeting GSA Rated Panels - Federal Specification AA-V-2737.

3. Manufacturer and General Contractor and Mechanical Sub-contractor to verify all penetrations shown on the vault system so as to provide complete system prior to fabrication.

4. Panel Connections: Vault panels shall be welded together in accordance with manufacturer's requirements for secure welding. Vault systems shall be attached to floor slab with connection angel.

C. Door System: Conform to GSA Security Class-5 standards.

1. Approval label shall state, in white letters of red background: Approved by GSA for security vault door meeting Class 5 security standards.

2. Door Size: Single Leaf Clear Opening 40" x 78".

D. Finish: Finish exposed surfaces, including structural framework, walls, and ceiling by manufacturer's standard ready for field painting.

1. Field Painting: Prepare and paint, painting by Division 9 Painting.

2.4 FINISHES

A. Vault system panels and door systems interior and exterior to be final painted under Division 9 Painting.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
 - 1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install modular vault on existing concrete pad as per manufacturer's requirements.
- B. Set modular vault plumb and aligned.
- C. Fasten modular vault panels by welding.
- D. Connect electrical power service to power distribution system according to requirements specified in Division 16.

3.3 ADJUSTING AND CLEANING

- A. Adjust doors, and hardware to operate smoothly, easily, properly, and without binding. Confirm that locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.
- C. After completing installation, inspect exposed finishes and repair damaged finishes.

END OF SECTION 13 9110