

GUIDE SPECIFICATIONS FOR DETENTION ELECTRONIC REQUIREMENTS



Detention Equipment Manufacturers Association



A Division of
NATIONAL ASSOCIATION OF
ARCHITECTURAL METAL MANUFACTURERS

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FORWARD

These specifications have been prepared in accordance with the CSI Section Format: Part 1 - General, Part 2 - Product and Part 3 – Execution. Guide specifications are intended to be used as the basis for developing job specifications and must be edited to fit specific job requirements. Inapplicable provisions shall be deleted, appropriate selections shall be made where there are choices, and provisions applicable to the job shall be added where necessary. Optional items or requirements are shown in brackets. **Notes and instructions to specifiers are given in italics directly following the paragraphs to which they apply. Notes that contain permissive language are not considered part of the standard.** Dates given with ASTM and other standards were current at the time this specification was published, and define the specific standards referenced herein. When a more recent standard is available, the specifier should verify its applicability to this guide prior to its inclusion. *While the CSI Section Format locates Delivery, Storage and Handling in Part 1, NAAMM Standard include them under Part 3 – Execution.*

SECTION 111990
DETENTION ELECTRONIC REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY:

- A. This section includes General Requirements that shall be applicable to all work described under this section, all related sections and contract documents.
1. Provide all equipment, labor, materials, tools, equipment and services required for the complete design, installation, checkout, startup, and testing of all systems shown and described in this section, all related sections and contract documents. Division 16 will provide all conduit raceways in accordance with Division 16 specifications for electrical material and installation requirements where not covered by Division 11.
 2. Provide all coordination as necessary between trades including but not limited to the following:
 - a. Division 4:
 - 1) Coordinate the installation of all backboxes and devices with masonry and steel blocks as required.
 - b. Division 8 and 11:
 - 1) Coordinate door frame locations, conduit penetrations, conduit routings, conduit and back-box installations with all trades whose equipment is to be integrated with the electronic systems provided by this section.
 - 2) Coordinate door control and monitoring power requirements, terminations and cable types.
 - 3) Coordinate with door hardware contractor for proper wiring of locks as required by code.
 - 4) Coordinate installation of pneumatic tubes on projects with pneumatic locks. The SEC shall install pneumatic tubes (provided by DEC) from manifolds in electronics equipment rooms to the locks. The DEC shall terminate all tubes and provide all other equipment, including necessary tubes between equipment locations.
 - c. Division 14:
 - 1) Coordinate elevator cab mounted equipment.
 - 2) Interface and coordinate with elevator system contractor for remote control and monitoring of elevator doors including cab dispatch, cab position indication, cab direction indication and status of door at each landing.
 - 3) Division 14 contractor shall provide interface terminals for each elevator in each elevator equipment room. Division 11 contractor shall provide all wiring from electronic security system equipment to elevator machine room including termination on interface terminals. Division 14 contractor to provide all wiring from elevator equipment room to elevator cab and install back-boxes in elevator cab for mounting of security devices by Division 11 contractor.
 - d. Division 15:
 - 1) Coordinate domestic water solenoid valve control with the Division 15 contractor.
 - e. Division 16:

- 1) Coordinate the installation of conduit and power conductors including the entrances and connection details to all boxes provided by Division 11 and Division 16 contractors.
 - 2) Coordinate the power requirements of all equipment, such that all adequate circuits and power distribution for all electronic equipment is available at the locations required.
 - 3) Coordinate with the Owners IT staff and the telephone system contractors for inmate telephone control.
- f. Coordinate roof and fire wall and smoke partition penetrations with other trades.
3. Wherever materials, methods or placements of materials and equipment for the electronic security systems Work is provided by other Contractors, it shall be the responsibility of the Security Electronics Contractor (SEC) to coordinate the Work and assure that it is provided in such a manner as to enhance the final system operation.
 4. This specification contains a combination of prescriptive and performance requirements. The Contractor is responsible for fully implementing the functions described in the Specifications and shown in the contract drawings. This will require the SEC to perform substantial work selecting system components, integrating system functions, and integrating various electronic security systems with each other and with equipment provided and installed by other Sections.

SPECIFIER: EDIT RELATED SECTIONS AS NECESSARY

1.2 RELATED SECTIONS:

- A. Drawings and all provisions of the Contract including General, Supplementary Conditions and Division 1 Specification sections, apply to the work of this section and its related sections.
- B. Division 1, Alternates
- C. Division 16 for required electrical work not covered by Division 11
- D. Section 111991 – Intercom and Paging Systems
- E. Section 111992 – Access Control System
- F. Section 111993 – CCTV System
- G. Section 111995 – Control Electronics
- H. Section 111995.1 – Equipment Racks, Cabinets and Enclosures
- I. Section 111995.2 – Touch Screen System
- J. Section 111995.3 – Video Visitation System
- K. Section 111995.4 – UPS System

1.3 REFERENCES:

- A. References to codes or standards identified in this document are for the convenience of the contractor and do not imply complete requirements whether or not referenced.
- B. Codes compliance: Comply with the current adopted editions of all applicable codes, including but not limited to:
 1. Federal, state and local codes, regulations and ordinances
 2. Uniform Building Code UBC
 3. National Electric Code NEC
 4. National Fire Code NFC
 5. Federal Communications Commission FCC

6. Occupational Safety and Health Act OSHA
7. All authorities having jurisdiction

C. Standards Compliance: Comply with the following standards as applicable:

1. Americans with Disabilities Act ADA
2. American National Standards Institute ANSI
3. American Society for Testing and Materials ASTM
4. Electronics Industry Association EIA
5. Electrical Testing Laboratories ETL
6. Factory Mutual FM
7. Institute of Electrical and Electronics Engineers IEEE
8. National Electrical Contractors Association NECA
9. National Electrical Manufacturers Association NEMA
10. National Fire Protection Association NFPA
11. Underwriter's Laboratories UL

1.4 SYSTEM DESIGN REQUIREMENTS

A. Combined Prescriptive And Performance Requirements

1. Division 11 includes a combination of prescriptive and performance specifications. Compliance with the performance specifications, as well as coordination and integration of the prescription requirements, is the responsibility of the SEC.
2. The performance requirements are intended to establish overall system performance requirements, satisfy the operational requirements, and establish the inter-coordination requirements for the Division 11 systems.
3. The prescriptive requirements establish the minimum quality, characteristics, and types of components, equipment, and materials to be used to achieve the stated system performance requirements.
4. The Contractor shall carefully consider all of the requirements for each of the Division 11 systems when preparing its bid. Any questions regarding the intent of these requirements, the scope of the systems, or their coordination requirements must be submitted in writing prior to bidding in accordance with the Instructions to Bidders. The Contractor shall have no claim for either extra compensation or extra time on the grounds that it did not understand the scope, the requirements of Division 11 or the coordination of trades.

B. Drawing Interpretation:

1. The Drawings are diagrammatic and indicate the general arrangement of systems and equipment unless indicated otherwise by dimensions or detail drawings. The Drawings utilize symbols, riser, block and single line diagrams to outline the Work to be provided. These drawings do not have any dimensional significance nor do they delineate every item required for the intended Work. No interpretation shall be made from the limitations of symbols and diagrams that all elements necessary for complete Work are included.
2. The Work shall be provided in accordance with the scope of work expressed on the Drawings and Specifications, and in conformance with the actual building architectural and structural conditions.