INDEX TO MATERIAL SPECIFICATIONS FOR:
SEDGWICK COUNTY JAIL ANNEX

DIVISION 1- GENERAL REQUIREMENTS

ARCHITECTURAL SPECIFICATIONS

On Drawings, Sheets A8.1 & A8.2

DIVISION 22 – PLUMBING

H A N N E Y & A S S O C I A T E S A R C H I T E C T S
1726 S. HILLSIDE ▪ WICHITA, KANSAS 67211 ▪ (316) 683-8965 ▪ FAX (316) 684-1441▪ Email HArchitect @ AOL.com

DIVISION 23 - HVAC

DIVISION 26 - ELECTRICAL

SECTION 07241

EXTERIOR INSULATION AND FINISH SYSTEMS

1. GENERAL:
All work included under this heading shall be subject to the General Conditions of the entire operation. The Contractor for this portion of the work is required especially to refer thereto.

1.2 The existing building is finished with 1-1/2" thick E.I.F.S. over a concrete wall panel.

1.3 This project removes a couple of doors and frames (155a and 204a). These openings shall be infilled with 8" reinforced concrete masonry units (CMU) and finishes the new CMU with an 1-1/2" thick E.I.F. system that matches the existing (color and finish).

1.4 This project removes (6) existing windows and infills the opening with 8" reinforced CMU and finishes the new CMU with an 1-1/2" thick E.I.F. system that matches the existing (color and texture).

1.5 All new CMU shall have an applicataion of fluid applied water proofing proofing prior to the installation of the E.I.F.S. by this contractor.

1.6 The E.I.F.S. shall include a drainage system to prevent traping of water behind or in the system.

2. WORK INCLUDED:

2.1 Application of Exterior Insulation and Finish System (E.I.F.S), class PB over concrete and concrete masonry surfaces as shown on the Drawings.

2.2 The repair of the existing E.I.F.S. where the attachment of the window bars with necessitate the removal of some of the existing system to allow the positive attachment of the window bars to the concrete wall. The color and texture shall match the existing.

3. QUALITY ASSURANCE:

3.1 Manufacturer Qualifications:
Firm regularly engaged in manufacturing products for system indicated and with at least (5) years successful experience in applications similar to that required for this Project.

3.2 Installer Qualifications:
Engage an installer that is certified in writing by system manufacturer as qualified for installation of systems indicated.

4. SUBMITTALS:

4.1 Product Data:
Submit manufacturer's technical data for each component of exterior insulation and finish system.

4.2 Samples for initial selection purposes shall be provided with manufacturer's standard color charts and small-scale samples indicating textural choices available.

4.3 Installer certificates signed by manufacturer certifying that installers comply with specified requirements.

5. PRODUCTS:

5.1 Exterior Insulation and Finish System (E.I.F.S) shall be Pleko Them System, as manufactured by Insul/Crete Company, Inc. or the approved equal.

A. Exterior assembly composed of an inner layer of thermal insulation board and an outer layer composed of a glass-mesh-reinforced base coat applied directly to board insulation and a textured protective finish coat. These assemblies are applied to a supporting substrate of construction as indicated.

B. Designation PB for class of exterior insulation and finish systems specified in this section is based on the classification developed by the Exterior Insulation Mfg. Assoc. (EIMA)

5.2 Provide system complying with the following performance requirements:

A. Bond Integrity:
Free from bond failure within system components for between system and supporting wall construction, resulting from exposure to fire, wind loads, weather, or other in-service conditions.

B. Weathertightness:
Resistant to water penetration from exterior into system and assemblies behind it or through them into interior of building which results in deterioration of thermal-insulating effectiveness or other degradation of system and assemblies behind system including substrates, supporting wall construction and interior finish.

C. Provide materials and construction which are identical to those tested for the following fire performance characteristics, per test method indicated below, UL or other testing and inspecting agencies acceptable to authorities having jurisdiction:

1. Flame spread rating of 25 or 4 less per ASTM E 84 for insulation board and protective finish coats, when each is tested individually.

5.3 Available Manufacturers: Subject to compliance with requirements, provide Class PB type A system of one of the following:

Dryvit System, Inc.
STO Industries
Senergy Inc.
Finestone, Simplex Products.
Pleko Products,Inc.
Insul/Crete Company, Inc.

5.4 Materials:

A. Provide adhesive, board insulation, reinforcing fabrics, base and finish materials, sealants and accessories which are compatible with one another for use by system manufacturer.

B. Provide selection made by the Architect from manufacturer's full range of standard colors and textures available for type of finish coat indicated.

C. Surface Sealer:
System manufacturer's standard adhesion intermediary designed to improve bond between substrate of type indicated and adhesive for application of insulation.

D. Adhesive shall be as recommended by manufacturer and designed for indicated use, compatible with substrate and complying with factory mixed formulation.

E. Molded Polystyrene Board Insulation:
Rigid, cellular thermal insulation formed by the expansion of polystyrene resin beads or granules in a closed mold to comply with ASTM C 578 for type I, 1.25 lb. density, Class A, aged in block form prior to cutting and shipping by air drying for not less than 6 weeks. Or by another method approved by system manufacturer. Producing equal results; 2' x 4' x thickness indicated but not less than the minimum thickness allowed by system manufacture; and complying with requirements of system manufacturer for corner squareness and other dimensional tolerances.

F. Base coat materials shall be manufacturer's standard, job-mixed formulation of portland cement complying with ASTM C 150, Type I, white or natural color; and system manufacturer's standard polymer-based adhesive designed for use indicated.

G. Finish coat materials shall be manufacturer's standard polymer emulsion admixture, color fast mineral pigments, sound stone particles and fillers.

H. Water shall be clean and potable.

I. Mechanical fasteners shall be manufacturer's standard corrosion-resistant fasteners assemblies.

5.5. <u>EXECUTION:</u>

A. Examine substrates, with installer present to determine if they are in satisfactory condition for installation. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. Preparation:

1. Protect contiguous work from moisture deterioration and soiling resulting from application systems.

2. Protect system, substrates, and wall construction behind them from inclement weather during installation.

3. Prepare and clean Substrates to comply with system manufacturer's requirements to obtain optimum bond between substrate and adhesive for insulation.

5.6. INSTALLATION:

A. Install as per manufacturer's recommendations.

B. Adhesively attach insulation to masonry substrate.

C. Mechanically attach insulation to gypsum sheathing substrate.

D. Stagger vertical joints in successive courses to produce running bond pattern.

E. Rasp or sand flush any irregularities projecting more than 1/32" to 1/16" from surface of insulation; do not create depressions deeper than 1/16".

F. Cut and fit insulation's around openings, corners, projections as detailed.

G. Treat exposed edges of insulation board, including those forming substrates of sealed joints within system or between system and other work, by encapsulating with base coat, reinforcing fabric, and finish coat.

H. Coordinate flashing installation with installation of insulation to produce a wall system which does not allow water to penetrate behind protective coating.

I. Apply base coat to exposed surfaces of insulation in minimum thickness specified by manufacturer.

J. Fully embed reinforcing fabric of standard weight in wet base coat to produce wrinkle-free installation with fabric continuous at corners an lapped or otherwise treated at joints comply with system requirements.

K. Apply finish coat over dry base coat in thickness required by system manufacturer to produce a uniform finish of texture and color matching approved sample.

5.7 Cleaning and Protection:

A. Remove temporary covering and protection of other work. Promptly remove protective coatings from window and doorframes, and any other surfaces outside areas indicated to receive protective coating.

B. Provide final protection and maintain conditions, in a manner acceptable to Installer and Manufacturer, which ensures system being without damage or deterioration at time of Substantial Completion.

End of Section 07241

SECTION 08110

HOLLOW METAL DOORS AND FRAMES

PART I - GENERAL:

1.1 RELATED DOCUMENTS:

1.1.1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 **SUMMARY:**

1.2.1 This Section includes the following:

a. Hollow metal doors
b. Hollow metal door frames
c. Sidelight frames
d. Borrowed-light frames
e. Fire-rated door and frame assemblies, including sidelights

1.2.2 **Specification Note:** This Section has been edited to include frames and doors that are not detention types. An **all-inconclusive statement** such as "**all interior doors or frames**" made herein **refers only to interior doors provided under this Section.**

1.2.3 Related Sections include the following:

a. Division 04 Section "Unit Masonry" for installing anchors and grouting frames in masonry construction.
b. Division 08 Section "Flush Wood Doors" for wood doors installed in steel frames.
c. Division 08 Section "Commercial Door Hardware" for door hardware and weather stripping.
d. Division 08 Section "Glazing" for glass in glazed openings in doors and frames.
e. Division 09 Section "Painting" for field painting factory-primed doors and frames.
f. Division 08 Section "Detention Doors and Frames" for detention type doors and frames.
g. Division 08 Section "Security Door Hardware" for security type door hardware.

1.3 DEFINITIONS:

1.3.1 Steel Sheet Thickness: Thickness dimensions, including those referenced in ANSI A250 8, are minimums as defined in referenced ASTM standards for both uncoated steel sheet and the uncoated base metal of metallic-coated steel sheets.

1.4 SUBMITTALS:

1.4.1 Product Data: For each type of door and frame indicated, include door designation, type, level and model, material description, core description, construction details, label compliance, sound and fire-resistance ratings, and finishes.

1.4.2 Shop Drawings: Show the following:

a. Elevations of each door design.
b. Details of doors including vertical and horizontal edge details.
c. Frame details for each frame type including dimensioned profiles.
d. Details and locations of reinforcement and preparations for hardware.
e. Details of each different wall opening condition.
f. Details of anchorages, accessories, joints, and connections.
g. Coordination of glazing frames and stops with glass and glazing requirements.

1.4.3 Door and Frame Schedule: Use same reference designations indicated on drawings in preparing schedule for doors and frames.

1.5 QUALITY ASSURANCE:

1.5.1 Hollow Metal Door and Frame Standard: Comply with ANSI A 250.8, unless more stringent requirements are indicated.

1.5.2 Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 252.

a. Test Pressure: Test using positive-pressure testing, unless otherwise noted or allowed by authorities having jurisdiction.
b. Door labels are to be mounted on the frame head and on the top of doors where continuous hinges are specified.

1.6 DELIVERY, STORAGE, AND HANDLING:

1.6.1 Deliver doors and frames cardboard-wrapped or crated to provide protection during transit and job storage. Provide additional protection to prevent damage to finish of factory-finished doors and frames.

1.6.2 Inspect doors and frames on delivery for damage and notify shipper and supplier if damage is found. Minor damages may be repaired provided refinished items match new work and are acceptable to Architect. Remove and replace damaged items that cannot be repaired as directed.

1.6.3 Store doors and frames at building site under cover. Place units on minimum 4-inch (100-mm) high wood blocking. Do not use plastic or canvas shelters. If door packaging becomes wet, remove cartons immediately. Provide minimum 1/4-inch (6-mm) spaces between stacked doors to permit air circulation.

PART II – PRODUCTS:

2.1 MANUFACTURERS:

2.1.1 Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Hollow Metal Doors and Frames:
1. Amweld Building Products, Inc.
2. Ceco Door Products; A United Dominion Company
3. Curries Company
4. Mesker Door, Inc.
5. Pioneer Industries, Inc.
6. Republic Builders Products
7. Steelcraft; A division of Ingersoll-Rand

2.2 MATERIALS:

2.2.1 Hot-Rolled Steel Sheets: ASTM A 569/A 569M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.

2.2.2 Cold-Rolled Steel Sheets for All Door Faces: ASTM A 366/A 366M, Commercial Steel (CS), or ASTM A 620/A 620M, Drawing Steel (DS), Type B; stretcher-leveled standard of flatness.

2.2.3 Metallic-Coated Steel Sheets for Exterior Doors and Frames: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with an A40 (ZF120) zinc-iron-alloy (galvannealed) coating; stretcher-leveled standard of flatness.

2.2.4 Electrolytic Zinc-Coated Steel Sheet for Interior Doors and Frames: ASTM A 591/A 591M, Commercial Steel (CS), Class B coating, mill phosphatized; suitable for unexposed applications; stretcher-leveled standard of flatness where used for face sheets.

2.3 DOORS:

2.3.1 General: Provide doors of sizes, thickness, and design indicated.

2.3.2 Interior Doors: Provide doors complying with requirements indicated below by referencing ANSI 250.8 for level and model and ANSI A250.4 for physical-endurance level:
a. Level 3 and Physical Performance Level A (Extra Heavy Duty), Model 1 (Full Flush), with 0.053-inch (1.3-mm) 16-gauge minimum thick faces.

2.3.3 Vison Lite Systems: Manufacturer's standard kits consisting of glass lite moldings to accommodate glass thickness and size of vision lite indicated.

2.4 FRAMES:

2.4.1 General: Provide steel frames for doors, transoms, sidelights, borrowed lights, and other openings that comply with ANSI A250.8 and with details indicated for type and profile. Conceal fastenings, unless otherwise indicated.

2.4.2 Interior Door Frames of 0.042-inch (1.0-mm) (18 gauge) minimum thick steel sheet for:
a. All interior doors, unless noted otherwise.

2.4.3 Door Silencers: Except on weather-stripped frames, fabricate and stop to receive three silencers on strike jambs of single-door frames and two silencers on heads of double-door frames.

2.4.4 Plaster Guards: Provide 1.016-inch (0.4-mm) thick, steel sheet plaster guards or mortar boxes to close off interior of openings; place at back of hardware cutouts where mortar or other materials might obstruct hardware operation.

2.4.5 Supports and Anchors: Fabricated from not less than 0.042-inch (1.0-mm) (7-gauge minimum) thick, electrolytic zinc-coated or metallic-coated steel sheet.
a. Wall Anchors in Masonry Construction: 0.1777-inch (4.5-mm) diameter, steel wire complying with ASTM A 510 (ASTM A 510M) may be used in place of steel sheet.

2.4.6 Inserts, Bolts, and Fasteners: Manufacturer's standard units. Where zinc-coated items are to be built into exterior walls, comply with ASTM A 153/A 153M, Class C or D as applicable.

2.5 FABRICATION:

2.5.1 General: Fabricate hollow metal door and frame units to comply with ANSI A250.8 and to be rigid, neat in appearance, and free from defects including warp and buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site.

2.5.2 Exterior Door Construction: For exterior locations and elsewhere as indicated, fabricate doors, panels, and frames from metallic-coated steel sheet. Close top and bottom edges of doors flush as an integral part of door construction or by addition of 0.053-inch (1.3-mm) thick, metallic-coated steel channels with channel webs placed even with top and bottom edges.

2.5.3 Interior Door Faces: Fabricated exposed faces of doors and panels from the following material:
a. Cold-rolled steel sheet.

2.5.4 Core Construction: Manufacturer's standard core construction that produces a door complying with SDI standards.

2.5.5 Clearances for Non-Fire-Rated Doors: Not more than 1/8 inch (3.2mm) at jambs and heads, except not more than ¼ inch (6.4mm) between pairs of doors. Not more than ¾ inch (19mm) at bottom.

2.5.6 Clearances for Fire-Rated Doors: As required by NFPA 80.

2.5.7 Single-Acting, Door-Edge Profile: Beveled edge.

2.5.8 Tolerances: Comply with SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames".

2.5.9 Fabricate concealed stiffeners, reinforcement, edge channels, louvres, and moldings from either cold- or hot-rolled steel sheet.

2.5.10 Exposed Fasteners: Unless otherwise indicated, provide countersunk flat or oval heads for exposed screws and bolts.

2.5.11 Thermal-Rated (Insulating) Assemblies: At exterior locations provide doors fabricated as thermal-insulating door and frame assemblies and tested according to ASTM C 236 or ASTM C 976 on fully operable door assemblies.

a. Unless otherwise indicated, provide thermal-rated assemblies with U-value of 0.41 Btu/sq. ft. x h x deg F (2.33W/sq. m x k) or better.

2.5.12 Hardware Preparation: Prepare doors and frames to receive mortised and concealed hardware according to final door hardware schedule and templates provided by hardware supplier. Comply with applicable requirements in ANSI A250.6 and ANSI A115 Series specifications for door and frame preparation for hardware.

a. High-Frequency Hinge Reinforcement: Provide high-frequency hinge reinforcements at door openings wider than 36-inch with mortise/butt type hinges at top hinge locations.

2.5.13 Frame Construction: Fabricate frames to shape shown.

a. Fabricate frames with mitered or coped and continuously welded corners and seamless face joints.
b. Provide welded frames with temporary spreader bars.

2.5.14 Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied hardware may be done at Project site.

2.5.15 Locate hardware as indicated on Shop Drawings or, if not indicated, according to ANSI A250.8.

2.5.16 Glazing Stops: Manufacturer's standard, formed from 0.032-inch (0.8mm) thick steel sheet.

a. Provide nonremovable stops on outside of exterior doors and on secure side of interior doors for lass and other panels in doors.
b. Provide screw-applied, removable, glazing stops on inside of glass and other panels in doors, unless otherwise noted.

2.6 FINISHES:

2.6.1 Prime Finish: Manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI A250.10 for acceptable criteria.

PART III – EXECUTION

3.1 INSTALLATION:

3.1.1 General: Install hollow metal doors, frames, and accessories according to Shop Drawings, manufacturer's data, and as specified.

3.1.2 Placing Frames: Comply with provisions in SDI 105, unless otherwise indicated. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.

a. Except for frames located in existing walls or partitions, place frames before construction of enclosing walls and ceilings.
b. In masonry construction, provide at least three wall anchors per jamb; install adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Acceptable anchors include masonry wire anchors and masonry t-shaped anchors.
c. In existing concrete or masonry construction, provide at least three completed opening anchors per jamb; install adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Set fames and secure to adjacent construction with bolts and masonry anchorage devices.
d. In metal-stud partitions, provide at least three wall anchors per jamb; install adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Attach wall anchors to studs with screws.
e. Install fire-rated frames according to NFPA 80.
f. For openings 90 inches (2286 mm) or more in height, install an additional anchor at hinge and strike jambs.

3.1.3 Door Installation: Comply with ANSI A250.8. Fit hollow-metal doors accurately in frames, within clearances specified in ANSI A250.8. Shim as necessary to comply with SDI 122 and ANSI/DHI A115.1G.

a. Fire-Rated Doors: Install within clearances specified in NFPA 80.
b. Smoke-Control Doors: Install to comply with NFPA 105.

3.2 ADJUSTING AND CLEANING:

3.2.1. Prime-Coat Touchup: Immediately after installation, sand smooth any rusted or damaged areas of prime coat and apply touch up of compatible air-drying primer.

3.2.2 Protection Removal: Immediately before final inspection, remove protection wrappings from doors and frames.

End of Section 08110

SECTION 08750

DETENTION EQUIPMENT GENERAL REQUIREMENTS

PART I - GENERAL:

1.1 SCOPE OF WORK:

1.1.1 The work under this section includes the general requirements for the detention equipment system shown on the Drawings and specified herein. Included are the following topics:

1.1.2 The General Contractor performing work under Section 08750 and Sections 08751, 08752 and 08753 shall be referred to in these specifications as the DEC (Detention Equipment Contractor).

1.1.3 Section 08751 – Detention Hollow Metal Doors and Frames
Section 08752 - Detention Hardware
Section 08753 – Security Fasteners

1.2 RELATED WORK:

1.2.1 Applicable provisions of Division 01 govern work under this Section.

1.2.2 Section 08753 Security Fasteners.

1.3 QUALITY ASSURANCE:

1.3.1 Bidders must have the capability to provide equipment in full and strict compliance of provisions of this specification. It is mandatory that the minimum given specifications be strictly adhered to, so as to provide a high level of quality to the design objectives. There shall be no substitutions allowed that have not been pre-approved by addendum.

1.3.2 Bidders shall have access to necessary equipment, organizational capacity and technical competence to perform work properly and expeditiously.

1.3.3 Bidders shall employ qualified, experienced, factory trained installers to perform the work. The A/E reserves the right to contact specified manufacturers and confirm that the bidder is an established and authorized reseller of detention equipment.

1.3.4 It is essential that bidders have an established record of successfully completed projects. The criteria used to evaluate whether a project has been successfully completed includes:
1. Contracts completed in accordance with plans and specifications.
2. Work completed within the time constraints of the project.
3. Fulfillment of guarantee requirements as specified in the contract documents.

1.3.5 A single bidder shall perform the work of this Section. This Contractor shall be regularly engaged in the installation and service of detention equipment including, but not limited to, equipment listed in 0850 through 08753.

1.4 UNLOADING AND STORAGE OF MATERIALS:

1.4.1 The DEC shall be responsible for receiving, unloading, storage and distribution of detention equipment as specified.

1.4.2 It will be the responsibility of the DEC to coordinate delivery times and handling arrangements. It will also be the responsibility of the DEC to acquire the necessary dry, secure, lockable storage space required for their materials. Materials shall be protected from moisture, condensation, temperature change, exposure to sun, and other means of potential damage.

1.4.3 Do not store products on or in the structure in a manner that might cause distortion or damage to the projects or the supporting structure.

1.4.4 The DEC shall repair or replace materials damaged during handling, shipment, storage, distribution or installation without additional cost or time impact to the project. Damaged materials will be repaired or replaced in an expeditious manner so as not to effect the project schedule or the work of other trades.

1.5 SERVICE REQUIREMENTS:

1.5.1 The DEC shall show satisfactory evidence, upon request, that they maintain a fully equipped local service organization capable of furnishing adequate inspection and service to the equipment, including replacement parts. The service organization shall be capable of a minimum 8 hour on site response time. The service organization shall produce evidence that they have fully experienced and established business for at least five years and proven satisfactory installations during that time. The DEC shall be prepared to offer a service contract for the maintenance of the systems upon expiration of the specified period of guarantee.

1.5.2 On-site service, parts and labor are to be provided at no cost to the Owner, for a period of 12-months from the date of final acceptance.

1.5.3 The DEC shall maintain engineering and service departments capable of rendering advice regarding installation and final adjustment of equipment.

1.6 SUBMITTALS:

1.6.1 Shop drawings shall be submitted for approval prior to ordering any equipment in accordance with Division 01 requirements. One complete set of drawings shall be submitted in electronic format as outlined herein.

1.7 SUBMITTAL REQUIREMENTS:

1.7.1 The DEC shall submit shop drawings for products in their scope of work in a composite submittal format. Submittals will not be deemed complete unless they contain the following components in their entirety:

a. SECTION 08751 – DETENTION HOLLOW METAL DOORS AND FRAMES
   1. Detention Door and Frame Shop Drawings
   2. Detention Hollow Metal Installation and Storage Instructions
   3. Manufacturer's letter of "UC" certification
   4. Frame Mounted Security Electronics Templates
   5. Load and Impact Test Reports

b. SECTION 08752 – DETENTION HARDWARE
   1. Detention Hardware Schedule
   2. Detention Sliding Device Shop Drawings
   3. Detention Hardware Catalog Cuts
   4. Detention Hardware Templates
   5. Detention Hardware Wiring Diagrams

1.7.2 The DEC shall complete submittals within six-weeks from the date they receive notice to proceed.

1.7.3 Upon receipt, the A/E will make a determination whether submittals are complete. Once submittals have been declared complete, a meeting will be scheduled to perform a comprehensive submittal review. Unless excused by the A/E, representatives from the following firms shall be present for the duration of the submittal review meeting:

1. Architect
2. General Contractor (DEC)
3. Owner's Representative
4. Masonry Contractor
5. Electrical Contractor
6. Detention Equipment Consultant
7. Security Electronics Contractor
8. Detention Hollow Metal Door and Frame Manufacturer

1.7.4 The submittal review meeting shall be held at the jobsite or a location to be determined. All parties are responsible for their own travel costs and expenses to, from and for the duration of the meeting. The meeting will require time as necessary to complete but shall not exceed three business days in length.

1.7.5 It will be the responsibility of the Architect to schedule the review meeting within four-weeks from the date submittals are deemed complete.

1.8 OPERATION AND MAINTENACE MANUALS:

1.8.1 The DEC shall provide three complete sets, in hardcover binders, of maintenance and operating instructions of products specified in Section 08752. Include as built drawings of the detention keying plans with a detailed schematic chart of the detention keying system showing all level of change and master keying assigned to the project. Manuals shall also include a material guide that contains the replacement part numbers and description of all components used.

1.8.2 Submit operation and maintenance manuals to the Architect and Owner for review, comment and approval. Promptly make any necessary corrections and submit final copies for Owner use.

PART II - PRODUCTS

2.1 EQUIPMENT STANDARDS:

2.1.1 A complete detention equipment system consisting of all the individual equipment shown and specified is required. These are largely functional specifications in order to maintain competitive bidding; however, it is expected that the minimum given specification requirements be strictly adhered to so as to provide a high level of quality with the design objectives. Equivalent manufacturers and products shall be in strict accordance with this specification.

2.1.2 It is the responsibility of the DEC to verify the completeness of the Drawings, Specification and Schedules and the suitability of devices to meet the intent of the specification. Any additional equipment, accessories or incidentals required, whether or not specifically mentioned herein, shall be provided by the Contractor without claim for additional payment, it being understood that a complete detention equipment system is required.

2.1.3 Materials and equipment shall be new and unused. Unless specifically approved by the A/E materials and equipment in the system shall be the standard design or model ordinarily supplied as a product item by manufacturers regularly engaged in the production of such equipment. They shall be the manufacturer's latest standard designs current at the time of delivery, modified only to the extent necessary to comply with the requirements of these specifications. Where two or more units of the same class of equipment are required, such units shall be the standard products of a single manufacturer. Manufacturers shall be established in the industry so that prompt and continued service and delivery of spare parts may be assured.

2.1.4 Temperature Ratings: Indoor components in heated areas shall be capable of full operation in relative humidity up to 90% and temperatures from 35 degrees F. to 120 degrees F. Outdoor components shall be capable of full operation in humidity up to 100% and temperatures from –30 degrees F. to 120 degrees F.

2.1.5 Fasteners for detention hardware, lock coverlets, removable glass stops, etc. shall be TORX security tape compatible with those specified in Section 08753 Security Fasteners.

2.1.6 Components that comprise the various systems shall be UL listed where a UL listing exists for that component.

2.2 CABLING AND TERMINATIONS:

2.2.1 The Division 26 Electrical Contractor is responsible for providing and installing Conduit, wire, cable, cable tray, junction boxes, pull boxes, and termination of field devices and head end equipment. Cabling, wiring and terminations shall be in conduit in accordance with Division 26.

2.2.2 Cabling shall be continuous and shall not be spliced between the field-mounted device and the receiving equipment. Door wiring shall be run from the door to the control panel without splices.

2.2.3 The DEC shall furnish and install factory pre-wired loom (wire harness) for the detention sliding door device system of Section 08752 Detention Hardware. Wiring harness to be installed in the cable tray located in the overhead housing of the detention sliding door device system. Terminations shall be performed by the Division 26 Contractor.

2.2.4 System wiring shall be color-coded with labeling and coding in accord with submitted and approved wiring diagrams. Color coding and tagging shall be maintained throughout the system at accessible locations to the cabling.

PART III – EXECUTION

3.1 COORDINATION:

3.1.1 The DEC shall make periodic visits to the site to review the work of other trades as it relates to the installation of the detention equipment. The coordination shall include, but not be limited to the following:

a. Examine the areas and conditions under which installation is to occur and document conditions detrimental to the proper and timely completion of the work. Installation should not proceed until unsatisfactory conditions have been corrected.

b. Prior to installation, meet that the project site to review products, installation methods, and any procedures required to perform the work.

c. Install products without damage to the work of other trades. Adjacent surfaces shall be protected from damage and staining during installation.

d. Furnish and install appropriate anchors to complete the work. Coordinate with other trades where necessary to make the necessary provision for proper installation.

e. Furnish setting drawings, diagrams, templates, and installation instructions for products.

f. Coordinate timing and distribution of materials so that distributed materials do not affect the work of other trades.

g. Coordinate proper locations of rough-in requirements and service connections with other trades.

3.2 INSTALLATION:

3.2.1 Securely place products in locations required. Install in alignment, free from warp, twist or distortion, plumb, level and true. Comply with approved shop drawings, manufacturer's instructions and recommendations for both handling and installation of the products for particular conditions of installation in each case, except where more stringent requirements are indicated or specified, or where project conditions require extra precautions or provisions for satisfactory performance of work. Where printed instructions are not available or do not apply to project conditions, consult manufacturer's technical representative for specific recommendations before proceeding. Do not install products which are observed to be defective.

3.2.2 Perform cutting, drilling, and fitting required for installation of detention equipment.

3.2.3 Set work accurately in location, alignment and elevation, measured from established lines and levels with lines visually parallel.

3.2.4 Cut necessary holes for installation or other work in detention equipment; comply with templates or detail drawings furnished by other trades prior to fabrication and installation of detention work.

3.2.5 Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and methods used in correcting welding work. Exposed plug welds shall be 1/8 inch minimum at 3/8-inch diameter holes equally and evenly spaced no greater than 8 inches on center. Exposed fillet (stitch) welds shall be 1/8 inch minimum, 1 inch long (minimum length) evenly spaced not greater than 12 inches on center. Field welding required for the installation of detention equipment shall be in accord with the recommendations of the detention equipment manufacturer. Where surfaces are to be exposed to view, grind and sand welds smooth; finish holes, defects, other imperfections so surfaces will be smooth when painted. Fill spaces between welds with metal body putty filler at all metal to metal joints. Metal to metal joints shall be completely filled and shall contain no cracks or seams that can be used for passage or storage of contraband. Use of security sealant in lieu of metal body putty filler prohibited.

3.2.6 Security sealants at metal to masonry/concrete joints will be the responsibility of the Section 08754 contractor.

3.2.7 Clean and touch up any scratches or paint damage that occurs during installation with primer prior to finish painting.

3.3 ADJUSTMENT AND REPAIR:

3.3.1 Before final connections to electrical power are made, test electrical operating or sensing items and adjust as required to provide proper functions. Test electrically controlled doors utilizing the control consoles under normal operating procedures.

3.3.2 Adjust and lubricate moving parts to operate smoothly and quietly, without biding.

3.3.3 Work shall be free from scratches, dents, permanent discoloration's and other defects; removed and replace damaged parts, surfaces with imperfections or damage during installation or thereafter before time of final project acceptance. Prior to touch-up painting, remove foreign material from metal surfaces including connections. Touch-up welds, bolted connections, and abraded/damaged areas in shop applied metal primer paint.

3.4 PROTECTION AND CLEANING:

3.4.1 During installation, protect adjacent surfaces and detention equipment from damage. Work shall be free from scratches, dents, permanent discoloration and other defects. Remove and replace damaged parts and surfaces imperfections prior to Owner occupancy.

3.4.2 Maintain storage and work areas in a neat and orderly condition during construction.

3.4.3 Remove non-permanent labels and non-permanent protective coatings. Thoroughly clean surfaces, including concealed work, in accord with manufacturer's instructions. Remove foreign materials prior to inspections and project closeout.

3.5 GUARANTIES:

3.5.1 The DEC shall warrant materials furnished and installed in their respective bid sections to be free from defects in materials and workmanship for a period of 1 year from the date of Substantial Completion as indicated in the Conditions of the Contract. In addition to the requirements listed in the Conditions of the Contract the DEC shall extend the correctional period for 1 additional year.

3.5.2 Material which has been misused, abused, or neglected by the Owner, defects damage caused by work or failure of work by others; ordinary wear and tear; or normal equipment adjustment which are within the Owner's operation and maintenance responsibility will not be covered by the warranty.

3.5.3 Any unauthorized modifications, repairs, or tampering shall constitute termination of this guarantee.

End of Section 08750

SECTION 08751

DETENTION HOLLOW METAL DOORS AND FRAMES

PART I - GENERAL:

1.1 SCOPE:

1.1.1 The work under this section includes all labor, materials, equipment, and services to provide a complete detention hollow metal door and frame system as show on the Drawings and specified herein.

1.2 SUMMARY OF WORK:

1.2.1 It will be the responsibility of the DEC to install all detention hollow metal doors.

1.2.2 It will be the responsibility of the DEC to install hollow metal frames in precast concrete and existing masonry partitions.

1.2.3 It will be the responsibility of the Division 04 – Masonry Contractor to install detention hollow metal frames in new masonry partitions.

1.2.4 It will be the responsibility of the Division 04 – Masonry Contractor to grout detention hollow metal frames in precast concrete partitions and masonry partitions.

1.2.5 It will be the responsibility of the DEC to weld and finish detention frame grout plugs.

1.3 RELATED WORK:

1.3.1 Applicable provisions of Division 01 govern work under this Section.
1.3.2 Section 08750 – Detention Equipment General Requirements
1.3.3 Section 08753 – Security Fasteners
1.3.4 Section 08754 – Security Sealants
1.3.5 Section 260500 – General Electrical Provisions
1.3.6 Section 284600 – Security System General Requirements

1.4 SUBMITTALS:

1.4.1 Prepare submittals in accord with the requirements of specification Section 08750 and include the following information:

a. Manufacturers shop drawing submittal. Drawings shall include, but are not limited to, schedule of openings, door and frame elevations, sections, glazing and anchor details. Shop drawings shall include details of lock pockets, door position switches, and rough in for any frame mounted security electronic components. Shop drawings shall clearly distinguish between factory installed conduits and conduit required by others. Shop drawings that do not conform to the above minimum requirements will be deemed incomplete.

b. Submit detention hollow metal installation and storage instructions. Reference NAAMM standard HMMA 840-99 for completeness.

c. Provide manufacturers “UC” (Underwriters Construction) letter of certification for any door and frame assembly NOT able to receive a physical fire label. Letter must state why the hollow metal assembly could not be fire rated. The letter shall state that although the assembly will not bear a physical fire label due to the reason listed, the procedures, quality and standards used during fabrication will be the same as those used for fabrication of a fire rated opening.

d. Submit templates of frame mounted security electronic devices with shop drawings and product data sheets of electrical back boxes. Submittal must include configuration for review of locations and mounting heights.

e. Submit copies of an independent testing laboratory reports certifying the following minimum performance requirements. Testing shall be in accord with ASTM F1450-97 and NAAMM standard HMMA 863-04. Testing of removable glass stops in accord with ASTM F1592-95A:

1. Static Load Test
   1.1 Under centrally applied load of 14,000 pounds at quarter points the maximum permitted deflection is no greater than 0.58 inch with a rebound of not to exceed 0.15 inch after release of load.

2. Rack Load Test
   2.1 Under a concentrated load of 7,500 pounds on one unsupported corner of a door the maximum defection shall not exceed 3.5 inches without failure.

3. Door Impact Test
   3.1 Under a battering attack of 200-foot pound impacts applied to the stop side of the door by a steel pendulum, detention door remains closed during the test and be fully operational upon completion.

4. Edge Crush Test
   4.1 Under an applied load of 8,000 pounds applied to the midpoint on the hinge edge of the door, the maximum deflection shall not exceed 0.25” without failure.

5. Removable Glass Stop Test
   5.1 Under a battering attack of 200 food pound impacts with a steel pendulum applied to the fixed stop side of steel plate glazed borrowed light, glazing stops remain in place and not more than one screw is broken upon completion.

1.5 QUALITY ASSURANCE:

1.5.1 Materials under this specification shall be provided by one of the manufacturers listed. Detention hollow metal doors and frames by other manufacturers may be considered upon written approval of the Architect. Requests for substitution shall include all pertinent technical data, descriptive product literature, and product specifications and must be received at least 7 days prior to the bid date of the last published addendum, whichever is earlier.

1.5.2 Prospective manufacturers shall be able to furnish materials that meet or exceed the requirements of this specification. Manufacturers must be in good financial standing, and able to demonstrate that they have been actively engaged in the manufacturing of detention hollow metal doors and frames for a minimum of 5 years.

1.5.3 Upon receipt of request for substitution, the A/E will make an investigation to determine the ability of the manufacturer to perform the work. The A/E reserves the right to request additional information as deemed necessary for the determination process. Upon approval, the prospective manufacturer will be listed by the addendum.

1.5.4 Detention doors and frames must be fabricated by the same manufacturer.

1.5.5 Approved manufacturers of detention hollow metal doors and frames:
- a. American Steel Products – Swainsboro, GA
- b. Apex Industries – Moncton, NB Canada
- c. Chief Industries – Grand Island, NE
- d. Habersham Security Metal Products – Cornelia, GA
- e. Steel Door Industries – Hartselle, AL
- f. Trussbilt – New Brighton, MN
- g. Willo Products Company – Decatur, AL

PART II – PRODUCTS

2.1 DETENTION HOLLOW METAL DOORS:

2.1.1 Provide a complete detention metal door system as detailed on the Drawings.

2.1.2 Interior detention hollow metal doors shall be factory formed with 12-gauge mild steel face sheets both sides. Exterior detention hollow metal doors shall be factory formed with 12-gauge minimum A60 galvannealed face sheets. Detention hollow metal doors in high humidity areas shall be fabricated with 12-gauge 304L stainless steel face sheets.

2.1.3 Doors shall be internally reinforced with one of the following systems:
- a. Continuous steel truss design core materials, 28-gauge minimum, having truncated triangular sections extending continuously from one door face to the other, spot welded to each face 2-3/4" o.c. horizontally and 3" o.c. vertically. Core material to extend full height and width of door.

- b. Continuous vertical hat sections, one such hat section welded to each face of the panel, 16-gauge with vertical webs no more than 4 in. apart. Hat sections shall be welded to each other at least 6 in. o.c. both sides in order to prevent separation.

2.1.4 All voids between stiffeners shall be completely l filled with fiberglass or mineral rock wool batt-type material.

2.1.5 Door edges shall be provided with additional reinforcing to prevent prying or compression attacks on the door edge. The thickness of the door edge, including reinforcing, shall not be less than 5/32". Weld reinforcing securely to the door edge. Seams shall be fully welded, leaving a visible smooth, continuous weld at the edge of the door.

2.1.6 Top and bottom of the door shall be closed with 12-gauge perimeter reinforcing. Top and bottom closing channels shall be welded to the edge reinforcing. Top and bottom of doors shall be finished flush with an additional inverted channel of not less than 14-gauge.

2.1.7 Hinge reinforcement shall be minimum 3/16" thick, 1-1/2" wide and 10" long. Reinforcements shall be securely welded to the door edge. In addition, a backup stiffener channel not less than 14-gauge shall be welded to each hinge reinforcing and to each door face, to prevent rocking failure of the hinge reinforcing.

2.1.8 Swing door edges shall be beveled 1/8" in 2". Sliding doors shall have a square edge.

2.1.9 Doors shall be reinforced, drilled, tapped, and prepared for mortised hardware in accordance with the final approved hardware schedule and templates. Doors shall be reinforced only for surface applied hardware. Reinforcing shall be as follows:
- a. Surface Mounted Hinges – 3/8" minimum

b. Mortised Hinges and Pivots – 3/16" minimum

c. Internal Reinforcing for Other Hardware – 12-gauge minimum

2.1.10 Glass stops shall be provided to secure glazing. Fixed glass stops shall not be less than 12-gauge and shall be spot welded to both face sheets 5.0 in o.c. minimum. Removable glass stops shall be constructied of 1-1/4" x 1'1/4" x 12-gauge angle. Angle stops shall be mitered or notched, fit tightly at the corner joints, and secured in place using 1/4 – 20 or ¼ - 28 button head, pin TORX, six-point tamper-resistant machine screws 2" from each end 8" o.c. max. Glass pockets shall be oversized ¼" to allow for 1/8" thick glazing tape each side of glass.

2.1.11 Food Pass/Cuff Port Openings – The food pass opening shall be fabricated using 10-gauge interior channels welded securely to the inside of both face sheets. Reinforcing for food pass locks and hinges shall consist of 10-gauge channel. The clear opening shall be shown on the architectural drawings. The four corner seams shall be continuously welded. The food pas shutter shall consist of a 10-gauge door with a ¼" backplate. The overall shutter size shall overlap the opening by ½" minimum on all four sides. Fluids entering the food pass shall not be allowed to seep down into the door construction. Fill any voids at metal joints at the bottom of the food pass with metal body putty filler.

2.1.12 Door undercuts
a. Swing doors without thresholds – ¾"
b. Swing doors with thresholds – 1/8 clearance bottom of door to top of threshold
c. Sliding doors – As dictated by sliding device manufacturer

2.1.13 If directed by the Architect, the erector shall destroy a randomly selected detention hollow metal door by sawing it in half. If examination discloses a door construction other than that which is specified, the door manufacturer shall replace all doors shipped to the project with doors constructed in compliance with this Specification. All costs associated with replacement shall be bore by the detention hollow metal door and frame manufacturer.

2.2 DETENTION HOLLOW METAL FRAMES:

2.2.1 Provide a complete detention metal frame system as detailed on the Drawings.

2.2.2 Interior detention hollow metal frames shall be factory formed from 12-gauge mild steel. All frames scheduled to receive bullet resistant glazing shall be factory formed from 10-gauge mild steel. Exterior detention hollow metal frames shall be factory formed from 12-gauge A60 galvannealed steel. Detention hollow metal frames in high humidity areas shall be fabricated from 12-gauge 304L stainless steel.

2.2.3 Frames shall be straight, neat in appearance, and free of warpage and buckling. Edge bend shall be straight and true. All frame joints shall be welded expect when overall size of frame prohibits shipment. In such cases appropriate frame splices shall be provided for each erection in the field.

2.2.4 Jamb, head, and sill profiles shall be as shown in architectural drawings. Formed stop height for doors shall be 5/8".

2.2.5 All door frames shall be prepped to receive door silencers. Single doors shall be prepped to receive 3 silencers per jamb. Double doors prepped to receive 2 silencers per jamb.

Provide protection to keep holes clear during construction. Provide Glynn-Johnson GJ64 door silencers or equal.

2.2.6 Frames that receive glazing shall utilize a double angle jamb profile as detailed. Overall glass stop height shall be 1-1/4". Removable glazing stops shall be constructed of 1-1/4" x 1-1/4" x 12-gauge angle. Protect inside of frame to assure complete screw penetration when frame is grouted full. Protect screws with plastic cups, mortar boxes, or Styrofoam blocks as required. Stops shall be mitered or notched, fit tightly at the corner joints, and secured in place with phillips head machine screws for shipment. Provide ¼ - 20 or ¼ - 28 button head, pin TORX, six-point, tamper-resistant replacement screws for final glass installation. Security screws are required 2" from each end and 8" o.c. max. Glass pockets shall be oversized ¼" to allow for 1/8" thick glazing tape each side of glass.

2.2.7 Corner joints shall have contact edges closed tight with faces mitered and stops butted or mitered. Corner joints shall be continuously welded. The used of gussets or splice plates in unacceptable.

2.2.8 Frames for multiple openings shall have mullion members with closed tubular shapes conforming to profiles shown on drawings and no visible seams or joints.

2.2.9 Hing reinforcement shall be a minimum of 3/16" thick, 1-1/2" wide and 10" long. Reinforcements shall be securely welded to the frame. The top hinge shall be additionally reinforced with a 3/16" thick backup angle welded to the hinge reinforcing and frame face.

2.2.10 Frames shall be reinforced, drilled, tapped, and prepared for mortised hardware in accordance with the final approved hardware schedule and templates. Frames shall be reinforced only for surface applied hardware. Reinforcing shall be as follows:

a.	Lock Bolt Opening Backup	12-gauge minimum
b.	Surface Mount Closers	12-gauge minimum
c.	Concealed Closers	3/16" minimum
d.	Strike Mounting Clips	3/16" minimum

2.2.11 Prepare frames to receive electric locks, hardware and electronic security components as scheduled. Provide all concealed conduits routed to the top or bottom of the frame as required. Provide a pull box with removable access plate at eh bottom of the frame when concealed conduit is routed to the floor. When electric locks are used in conjunction with door position switches it is the responsibility of the detention hollow metal manufacturer to provide the conduit between the lock box and the door position switch. Provide all electrical boxes required for frame mounted electronic security components. All conduits furnished and installed by the detention hollow metal manufacturer shall be ¾" IMC.

2.2.12 Provide 12-gauge floor clips welded in place at the bottom of each jamb. Floor clips shall have two 7/16" diameter holes for anchoring to floor. Provide adjustable floor clips if scheduled.

2.2.13 Provide wire loop anchors for each jamb mounted in masonry. Loops shall consist of ¼" diameter smooth bar welded to a 10-gauge anchor tab with holes for bar reinforcement. In the installed position the loop shall extend 6" minimum form the throat of the frame. Provide sufficient anchors to permit maximum spacing between anchors of 16". Openings scheduled to receive fire ratings, shall be provided with anchors of type, size, and spacing that comply with UL fire rating requirements.

2.2.14 Provide grout holes with plugs for frames installed in existing concrete or masonry openings. Grout guards of not less than 24-gauge steel shall be welded in place to protect all mortised hardware. Grout guards for closer shall be 18-gauge minimum.

2.2.15 All frames shall be provided with two temporary steel spreaders welded to the base of the jambs to serve as bracing during shipping and handling. Spreaders are for shipping purposes only. Frame installer shall remove spreaders prior to installation. Frame spreaders shall NOT be used to determine proper frame tolerance.

2.3 FINISHES:

2.3.1 Doors and frames shall receive one coat of the manufacturer's shop epoxyester primer. All material shall be smooth and free of surface blemishes. Prior to painting, all surfaces shall be cleaned of rust, oil, and other impurities to condition the surface of the metal and promote paint adhesion. Prime paint shall be a minimum of 2 mils dry thickness. Frames shall be completely primed prior to the installation of glazing stops. Likewise, glazing stops shall be completely primed prior to installation.

PART III – EXECUTION

3.1 COORDINATION

3.1.1 The DEC shall verify all dimensions, elevations, and job site conditions before installation begins.

3.1.2 The DEC shall make periodic visits to the site to review the work of the other trades as it relates to the installation of the detention hollow metal doors and frames.

3.2 UNLOADING, STORAGE AND DISTRIBUTION OF MATERIALS:

3.2.1 The DEC will be responsible for receiving, unloading and storage of detention hollow metal doors and frames.

3.2.2 Detention hollow metal doors and frames shall be stored in accord with NAAMM standard HMMA 840-99.

3.2.3 It will be the responsibility of the DEC to distribute detention hollow metal frames to the appropriate floor or designated are of construction staging. It will be the responsibility of the DEC to distribute detention hollow metal doors to each opening.

3.3 INSTALLATION:

3.3.1 Install detention hollow metal doors and frames true and plumb in accord with NAAMM standard HMMA 890-99 and manufacturer's recommendations.

3.3.2 The contractors responsible for setting frames shall provide all expansion anchors, site welding, body putty, filling, sanding and priming required at all frame splices and closure plates. Field welding of metal to metal joints shall be in accord with manufacturer's recommendations. Exposed welds that occur at frame corners shall start no further than 6 inches above sills. Grind welds smooth and fill spaces between welds with metal body putty filler. All metal to metal joins shall be completely filled and shall contain to cracks or seams that can be used for passage or stoarage of contraband. Use of security sealant in lieu of metal body putty filler prohibited. All field welds shall be touched up with primer supplied by the detention hollow metal manufacturer.

3.3.3 The Division 04 – Masonry Contractor shall grout solid all detention hollow metal frames including intermediate mullions or tubular elements with a strength of at least 14 MPa (2,000 psi) mix or slush solid with mortar during wall construction. Check all grout guards and conduit connections to make sure they have not loosened prior to grouting.

3.3.4 The DEC must be present on site at the beginning of detention frame installation to train and coordinate with Division 04 – Masonry Contractor in the proper setting of detention frames.

3.3.5 Security sealants at all metal to masonry/concrete joints will be the responsibility of the Section 08754 contractor.

3.3.6 It will be the responsibility of the DEC to touch up all scratches or paint damage that occurs during installation. Damaged surfaces shall be cleaned and touched up with primer prior to finish painting. The DEC shall use touch up primer provided by the detention hollow metal manufacturer for compatibility with factory applied prime paint. Protection of work in place shall be in accord with Division 01 requirements.

End of Section 08751

SECTION 08752

DETENTION HARDWARE

PART I - GENERAL:

1.1 SCOPE OF WORK:

1.1.1 Provide all labor, equipment, materials and supervision to furnish and install security hardware as shown on the drawings and specified herein

1.1.2 The requirements of specification section 08750 pertain to the work of this section.

1.2 RELATED WORK:

1.2.1 Applicable provisions of Division 01 govern work under this Section.

1.2.2 The requirements of specification section 08750 pertain to the work of this Section.

a. Applicable provisions of Division 01govern work under this Section.
b. Section 08750 – Detention Equipment General Requirements
c. Section 08751 – Detention Hollow Metal Doors and Frames
d. Section 08753 – Security Fasteners
e. Section 260055 – General Electrical Provisions
f. Section 284600 – Security System General Requirements

1.3 SUBMITTALS:

1.3.1 Prepare submittals in accord with the requirements of specifications Section 111900 and include the following hardware information:

a. Detention Hardware Schedule. Provide a detention hardware schedule that contains the following minimum requirements: Schedule of openings, hardware groups, lock types, key sides, side of lock mountings, and lock handings. Hardware schedules that do not conform to the above minimum requirements will be deemed incomplete.
b. Manufacturer's product data (catalog cuts) for each scheduled hardware item.
c. Manufacturer's template data for each scheduled hardware item.
d. Manufacturer's wiring diagrams for each scheduled electrical hardware item.
e. Provide 3 copies of operation and maintenance manuals for all materials specified in this section upon completion of the project. Submit manuals in accord with the requirements of specification Section 08750. Include as built drawings of the detentions keying system with a schematic chart showing all levels of change and master keying assigned to the project.

1.4 QUALITY ASSURANCE:

1.4.1 Provide materials specified under this section by one of the manufacturers listed. Detention hardware by other manufacturers may be considered upon written approval of the Architect. Requests for substitution shall include all pertinent technical data, descriptive product literature, and product specifications and must be received at least 7 days prior to the bid date or the date of the last published addendum, whichever is earlier.

1.4.2 Prospective manufacturers shall be able to furnish materials that meet or exceed the requirements of this specification. Manufacturers must be in good financial standing and be able to demonstrate that they have been actively engaged in the manufacturing of detention hardware for a minimum of 10 years.

1.4.3 All locks must be provided from a single manufacturer.

1.5 ACCEPTABLE PRE-APPROVED DETENTION LOCK MANUFACTURERS:

1.5.1 Southern Folger Detention Equipment – San Antonio, TX
1.5.2 No known equal

PART II - PRODUCTS

2.1 FRAME MOUNTED ELECTRIC LOCKS:

2.1.1 Electro-Mechanical 2" Jamb Locks – Solenoid Operated
- a. Manufacturer/Series:
  1. Southern Steel 10300E Series or equal
- b. 4VDC solenoid operated
- c. Internal switches monitor status of bolt to show deadlocked and unlocked conditions.
- d. Bolt throw 3/4" flush when retracted
- e. Mechanical latchback
- f. Galvanized case and cover
- g. Stainless steel roller bolt and latchbolt strike
- h. Standard commercial key cylinder with US26D finish
- i. Standard functions:
  1. Electric:
     1.1 Remote switch activates solenoid which retracts latchbolt. Latchbolt remains retracted until door is open approximately 2", then it releases, automatically latches and deadlocks when the door is closed.
  2. Mechanical:
     2.1 Latchbolt is retracted with a builder's hardware key at the door, then it releases and automatically latches and deadlocks when the door is closed.
  3. Emergency:
     3.1 Latchbolt is retracted electrically when switch is in open position and remains retracted indefinitely via continuous-duty solenoid. When the emergency-hold open is deactivated, the remote switch is returned to locked position. Latchbolt remains retracted until the door is opened approximately 2", then it releases, automatically latches and deadlocks when the door is closed.

2.1.2 Electro-Mechanical 2" Jamb Locks – Motor Operated
- a. Manufacturer/Series:
  1. Southern Steel 10300MD series or equal
- b. 24VDC motor operated
- c. Internal switches monitor status of bolt to show deadlocked and unlocked conditions
- d. Bolt throw 3/4" flush when retracted
- e. Gear motor drive retracts latch against side loads of 600 pounds
- f. Mechanical latchback
- g. Galvanized case and cover
- h. Stainless steel roller bolt and latchbolt strike
- i. Standard commercial key cylinder with US26D finish
- j. Standard functions:

1. Electric:
   1.1 Remote two-position maintained contact switch is required for this function. Latchbolt is retracted electrically when switch is in open position. Div 28 locking control software to initiate 3 second delay at which the remote switch will be triggered to return to locked position. When remote switch is returned to locked position, latch bolt will extend regardless of door position.

2. Mechanical:
   2.1 Latchbolt is retracted with a builder's hardware key at the door, then it releases and automatically latches and deadlocks when the door is closed.

3. Emergency:
   3.1 Remote two-position maintained contact switch is required for this function. Div 28 locking control software to initiate emergency hold open feature.

   3.2 Latchbolt is retracted electrically when switch is in open position and remains retracted indefinitely. When the emergency hold open is deactivated, the remote switch is returned to the locked position, latchbolt will extend regardless of door position.

2.2 DOOR MOUNTED MORTISE LOCKS:

2.2.1 Mortised Door Locks:

a. Manufacturer Series:
   1. Folger Adam 110
   2. No known equal

b. Mortised into door

c. Pin tumbler mogul key cylinder with US26D finish

d. Lever handles active or inactive as scheduled

e. Stainless steel latchbolt, deadbolt, and deadlock actuator

f. Provide keeper as scheduled

g. Functions: Provide as designated in the detention hardware schedule

h. Slam lock:
   1. Levers both sides always rigid
   2. Latchbolt operated by key one side or both sides as scheduled
   3. Deadlock actuator

i. Deadlock
   1. Deadbolt operated by key one side or both sides as scheduled

j. Passage Set
   1. Latchbolt operated by lever either side or safety knob as scheduled. Provide solid brass, conical shaped safety knob. Safety knobs to be secured to door by means of 2 thru-bolts. Exposed set screws at safety knob shall not be permitted.

2.3 DOOR MONITOR AND CONTROL:

2.3.1 Overhead Concealed Closer with Door Position Switch:
- a. Manufacturer/Series:
  1. LCN 2210-DPS
  2. Norton 7970-DPS
- b. Fully hydraulic
- c. Full rack and pinion with cast iron cylinder
- d. Separate adjustments for latch speed, general speed and back-check
- e. Door position switch
- f. TORX® security mounting screws
- g. Aluminum powder coated finish

2.3.2 Magnetic Door Position Switch:
- a. Manufacturer/Series:
  1. Southern Steel 200MRS-TB
  2. R.R. Brink 201020
  3. Sentrol 2767
- b. Built-in door indicator switch/magnetic reed switch
- c. Actuated magnet recessed into the door edge
- d. Switch unit recessed into the door frame
- e. 24VDC electrical requirement
- f. Triple biased

2.3.3 Keeper Switch – Deadlatch:
- a. Manufacturer/Series:
  1. Southern Steel 500-CL series or equal
- b. Switch to monitor bolt position

2.3.4 Local Electric Key Switch:
- a. Manufacturer/Series:
  1. Southern Steel 936 series or equal
- b. 15-amp rating
- c. Mogul key cylinder as scheduled
  1. Provide key switches that are separately mounted and not integral to the lock. Local LED indication lights are not required. Key switches should be fabricated by the same manufacturer as detention locks.
  2. Provide custom electrical box for wall mounted applications. All wall mounted key switches to be flushed mounted in masonry or pre-cast concrete walls as scheduled.
- d. Swing Doors:
  1. Two position, momentary contact, spring return to center
  2. Insert key, turn to right, door unlocks, key returns to center and is removed

2.3.5 Push Button/Call Button:
- a. Manufacturer/Series:
  1. Folger Adam IPB-1
  2. Southern Steel 906
  3. R.R. Brink 201028
  4. Air Teq 6300

- b. Provide push buttons that are separately mounted and not integral to the lock
  1. Push buttons shall be momentary contact
  2. Faceplate US26D finish

3. Provide custom electrical box for wall mounted applications. All wall mounted key switches to be flush mounted in masonry or pre-cast concrete walls as scheduled.

2.4 DOOR HARDWARE:

2.4.1 Full Mortise Hinge:
- a. Manufacturer/Series:
  1. Southern Steel 204FMSS
  2. Portland Hardware PH 745 SSC ST
- b. 4-1/2" x 4-1/2" x 3/16"
- c. Cast stainless steel hinge leafs and hinge pin
- d. Drilled and countersunk for TORX® security mounting screws
- e. US32D finish
- f. Shall meet performance requirements for Grade 1 impact and cycle test according to ASTM F1758-96 Standard Test Method for Detention Hinges Used on Detention Grade Swinging Doors
- g. Provide 4 hinges per door up to 84" in height and one extra hinge for each additional 24" of height or fraction thereof
- h. Provide 4 hinges per door up to 38" in width and one extra hinge for each additional 12" of width or fraction thereof

2.4.2 Raised Door Pull:
- a. Manufacturer/Series:
  1. Folger Adam 2
  2. Southern Steel 212C
  3. R.R. Brink 300021
  4. Air-Teq 612
  5. Portland Hardware PH 701
- b. Investment Cast Stainless Steel
- c. Drilled countersunk for TORX® security mounting screws
- d. US26D finish

2.4.3 Recessed Door Pull:
- a. Manufacturer/Series:
  1. Folger Adam 4
  2. Southern Steel 214S
  3. R.R. Brink 300011
  4. Air-Teq 614
  5. Portland Hardware PH 702
- b. Investment Cast Stainless Steel
- c. Drilled and Countersunk for TORX® security mounting screws
- d. US26D finish

2.4.4 Kickplate:
- a. Manufacturer/Series:
  1. Rockwood K1125
  2. IVES 8400
- b. 6" high x 2" less than door width x 1/8" thick
- c. Stainless steel
- d. Beveled four edges
- e. Stop side mounted
- f. TORX® security mounting screws or 5/32" 18-8 stainless steel blind rivets

g. US32D satin finish

2.4.5 Automatic Door Bottom:
a. Manufacturer/Series:
1. Pemko 4301CRL
2. National Guard Products 420NA
3. Reese Enterprises 330C
b. 2-3/4" high x door width x 31/32" deep
c. TORX® security mounting screws
d. Provide at all exterior openings or where scheduled
e. Clear anodized aluminum

2.4.6 Smoke Gasket:
a. Manufacturer/Series:
1. Pemko S88D
2. National Guard 5050B
3. Reese Enterprises 797B
b. Press on gasket
c. Provide at head and jambs
d. Provide at all fire rated openings or where scheduled
e. Dark bronze

2.4.7 Wall Bumper:
a. Manufacturer/Series:
1. Stanley 3002
b. 2-5/8" diameter x 1-1/4" projection
c. Convex design
d. Black neoprene 80-90 Shore A durometer hardness
e. Wall mounted
f. Attach with 3/8" x 2-1/2" TORX® security button head sleeve anchor expansion bolt
g. Use only at doors scheduled to receive raised pulls
h. Wall bumpers are not required if standard operation of door closer prohibits door from striking wall

2.4.8 Door Stop:
a. Manufacturer/Series:
1. Portland Security Hardware PSH-760
2. Hager 269T
b. 2" diameter x 3-1/2" projection
c. Black neoprene 80-90 Shore A durometer hardness
d. Wall mounted
e. Request approval from Architect for all floor mounted stop locations
f. Wall/floor stops are not required if standard operation of door closer prohibits door from striking wall

2.5 KEYS AND KEYING:

2.5.1 The contractor of this section shall meet with the Owner and Architect to determine final keying requirements. Each key shall be individually stamped in accord with the following designations or any changes in designation provide during the keying meeting.

2.5.2 Keys shall be stamped with the following designations and provided in the following quantities:
a. Mogul Normal Use:

Code	Key Type	Description	Quantity
B1	Builder's Hardware	Detention Doors	10

2.5.3 Keys shall ship direct from the manufacturer to an authorized receiver via registered mail or UPS. The receiver of detention keys shall be determined during the keying meeting.

2.5.4 The DEC shall obtain a set of keys from the Owner for use during construction of the project. Keys shall be returned to the Owner upon completion of each work day. If keys are lost during construction, it will be the responsibility of the DEC to re-key all hardware effected by the loss at no additional cost to the project. The DEC shall exercise utmost care and sound judgement while in possession of detention keys.

PART III – EXECUTION

3.1 COORDINATION:

3.1.1 The DEC shall verify all quantities, dimensions, and job site conditions before installation begins

3.2 INSTALLATION:

3.2.1 Install detention hardware in strict accordance with manufacturer's recommendations.

3.2.2 Adjust all hardware components for proper operation. Draw tight all exposed security fasteners.

3.2.3 Field welding of metal to metal joints shall be in accord with manufacturer's recommendations. Exposed welds that occur at frame corners and shall start no further than 6 inches above sills. Grind welds smooth and fill spaces between welds with metal body putty filler. All metal to metal joints shall be completely filled and shall contain no cracks or seams that can be used for passage or storage of contraband. Use of security sealant in lieu of metal body putty filler is prohibited.

3.2.4 All field welds shall be touched up with primer supplied by the detention sliding device manufacturer.

3.2.5 Security sealants at all metal to masonry/concrete joints will be the responsibility of the Section 08754 Contractor.

3.2.6 It will be the responsibility of the DEC to touch up all scratches or paint damage that occurs during installation. Damaged surfaces shall be cleaned and touched up with primer prior to finish painting. The DEC shall use touch up primer provided by the detention sliding device manufacturer for compatibility with factory applied prime paint. Protection of work in place shall be in accord with Division 01 requirements.

3.3 SLEEVES

3.3.1 Where conduits, cable trays, or other electrical raceways must pass through floors or wall that are to be constructed of poured in place concrete, the contractor shall provide sleeves in the formwork prior to the concrete pour. It shall be the DEC's responsibility to provide sleeves for his work unless specifically indicated otherwise on the plans. Prior to installing the sleeves, the contractor shall prepare drawings indicating the locations, quantities, sizes, and spacings of sleeves anticipated. The drawings shall be forwarded to the structural engineer for approval.

3.3.2 Floor sleeves shall extend a minimum of 2 inches above the finished floor.

3.4 DETENTION HARDWARE CATEGORIES:

3.4.1 The general layout of the detention hardware schedule is as follows:

a. DH-1: Exterior Doors
b. DH-2: Interior Doors
c. DH-3: Fire-rated Doors
d. DH-4: Owner Stock

3.5 DETENTION HARDWARE SCHEDULE:

HDWR GRP	QTY	SE	DESCRIPTION	SUPPLIER	NOTES
DH-1			**EXTERIOR DOORS**		
	4		204FMSS Hinges	Southern Steel	1
	1	E	10300F-2 Solenoid Lock x24VCD	Southern Steel	
	1		10300 Series Mortise Strikeplate	Southern Steel	
	1	D	2210-DPS Overhead Concealed Closer with Door Position Switch	LCN	
	2		212C Raised Pulls	Southern Steel	
	1		K1125 Kickplate	Rockwood	
	1		114A Pass-Proof Threshold	Pemko	
	1		Pass-Proof Threshold Hook x Type 304 S.S.	HM Manufacturer	
	1		312CR Jamb Weatherstrip	Pemko	
	1		347A Rain Drip	Pemko	
	1		68 AR Drip Gasket		
	1		PSH-760 Door Stop	Portland Sec Hdwr	2
DH-2			**INTERIOR DOORS**		
	4		204FMSS Hinges	Southern Steel	1
	1	E	10300MD-2 Motor Lock x 24VDC	Southern Steel	
	1		10300 Series Mortise Strikplate	Southern Steel	
	1	D	2210-DPS Overhead Concealed Closer with Door Position Switch	LCN	
	2		212C Raised Pulls	Southern Steel	
	1		K1125 Kickplate	Rockwood	
	1		114A Pass-Proof Threshold	Pemko	
	1		Pass-Proof Threshold Hook x Type 304 S.S.	HM Manufacturer	
	1		PSH-760 Door Stop	Portland Sec Hdwr	2
DH-3			**FIRE-RATED DOORS**		
	4		204FMSS Hinges	Southern Steel	1
	1	E	10300MD-2 Motor Lock x 24VDC	Southern Steel	
	1		10300 Series Mortise Strikeplate	Southern Steel	
	1		110-07 Passage Set x LTE LeverTrak	Folger Adam	3
	1		110-4DB Mortise Strike with Dust Box	Folger Adam	
	1	D	2210-DPS Overhead Concealed Closer with Door Position Switch	LCN	
	2		212C Raised Pulls	Southern Steel	
	1		K1125 Kickplate	Rockwood	
	1		114A Pass-Proof Threshold	Pemko	
	1		Pass-Proof Threshold Hook x Type 304 S.S.	HM Manufacturer	
	1		S88D Head and Jamb Press-On Smoke Seal	Pemko	4
	1		PSH-760 Door Stop	Portland Sec Hdwr	2
DH-4			**OWNER STOCK**		
	1	E	10300E-2 Motor Lock x 24VDC	Southern Steel	
	1	E	10300MD-2 Motor Lock x 24VDC	Southern Steel	
	2		10300 Series Mortise Strikeplate	Southern Steel	
	1		TSCRW-25 Torx Security Screw Maintenance Kit	Sentry Security Fas.	

DETENTION HARDWARE SCHEDULE NOTES:

1. See Section 08752 for correct hinge quantity at each door opening.

2. Provide Stanley 3002 wall bumpers at raised pull locations whenever possible. Provide Portland Security Hardware PSH-760 door stops elsewhere. It will be the responsibility of the DEC to provide a wall stop suitable for each detention door opening condition. Selection of wall stop based upon wall construction, mounting location, specified hardware and guidelines noted. If floor stops are required, consult with A/E and Owner prior to mounting. Wall bumpers and door stops not required if standard operation of door closer prohibits door from striking wall.

3. Mount Passage set at 38” to centerline of lever. Mount 1300 strike above passage set as close as possible to the mortised lock prep in the door.

4. Provide serrated cuts in smoke gasket 6” on center, provide serrated cuts in smoke gasket only at doors subject to normal (non-emergency) inmate traffic.

End of Section 08752

SECTION 08753

SECURITY FASTENERS

PART I - GENERAL:

1.1 SCOPE:

1.1.1 This Section describes the requirements of security fasteners as shown on the Drawings and specified herein. Included are the following topics:

1.2 DESCRIPTION:

1.2.1 All fasteners used in fabrication and installation of project components that are exposed to inmates in detention areas shall comply with the requirements of this Section. Requirements for security fasteners are excluded for the following items and locations:

a. All fasteners in non-detention areas
b. Fasteners used above suspended ceilings
c. Fasteners used behind access panels or within pipe and duct chases
d. Fasteners used for moveable furnishings, storage shelving, and cabinet hardware
e. Fasteners used in mechanical, electrical, generator, communications, and security electronics equipment rooms
f. Fasteners used within secured control rooms
g. Fasteners used for roof mounted equipment

1.2.2 Applicable provisions of Division 01 govern work under this Section

1.3 SUBMITTALS:

1.3.1 Submit product data under provisions of Division 01

1.4 QUALITY ASSURANCE:

1.4.1 Materials under this specification shall be provide by one of the manufacturers listed. Security fasteners by other manufacturers may be considered upon written approval of the Architect. Requests for substitution shall include all pertinent technical data, descriptive product literature, and product specifications must be received at least 7 days prior to the bid date of the date of the last published addendum, whichever is earlier.

1.4.2 Prospective manufacturers shall be able to furnish materials that meet or exceed the requirements of this specification. Manufacturers must be in good financial standing, and able to demonstrate that they have been actively engaged in the manufacturing of security fasteners for a minimum of 10 years.

1.4.3 Upon receipt of request for substitution, the A/E will make an investigation to determine the ability of the manufacturer to perform the work. The A/E reserves the right to request additional information as deemed necessary for the determination process. Upon approval, the prospective manufacturer will be listed by addendum.

1.4.4 TORX® is a registered trademark of Camcar Div. of Textron, Inc. All security fasteners shall be provided from a licensed manufacturer of TORX® products.

1.4.5 Approved manufacturers of security fasteners:

a. Bryce Fastener Company, Inc. – Seattle, WA
b. Camcar, Division of Textron, Inc. – Rockford, IL
c. Holo-Krome Company – West Hartford, CT

d. Safety Socket Screw Corporation – Chicago, IL
e. Sentry Security Fasteners – Peoria, IL
f. Tamper-Pruf Screws, Inc. – Paramount, CA
g. Riteloc Company – Freeport, NY

PART II – PRODUCTS

2.1 SECURITY FASTENERS:

2.1.1 Select Fastener size, style and strength appropriate for their intended function. Fasteners installed in painted areas have heads primed for finish paint. Provide stainless steel construction for fasteners exposed in wet areas or installed in wet construction materials. Provide plated fasteners where required.

2.1.2 All exposed security fastener heads shall be TORX®, six-point, pinned, tamper-resistant fasteners #4 through ¾" diameter.

2.2 TOOLS:

2.2.1 All security fasteners shall be operable by tools produced by the fastener manufacturer or by a producer licensed by the fastener manufacturer. The structural capacity of the tamper-resistant fasteners shall be in every instance equal to or greater than the physical properties of the fastening tool.

2.2.2 Size, shape, and variations of security fasteners shall require no more than 12 different tools or wrenches to service all security fasteners on the project.

2.2.3 Provide 6 sets of tools for each size security screw installed on the project. Package tools in an individual container and deliver to the Owner.

PART III – EXECUTION

3.1 GENERAL:

3.1.1 Install security fasteners in accordance with manufacturer's instructions using proper tools and procedures.

3.1.2 Draw tight all exposed security fasteners. Tack weld all hex-head expansion type fasteners exposed to the inmate within the security perimeter.

3.1.3 It will be the responsibility of the Contractor to replace damage or defective fasteners. It will also be the responsibility of the Contractor to ascertain that the replacement fasteners will not adversely affect the anchorage, performance, operation, warranty, or any other aspect of the products anchored or assembled.

End of Section 08753

SECTION 08754

SECURITY SEALANTS

PART I - GENERAL:

1.1 **SCOPE:**

1.1.1 The work under this section includes all labor, materials, equipment and services, to provide security sealants as shown on the Drawings and specified herein. Included are the following topics.

1.2 RELATED WORK:

1.2.1 Applicable provisions of Division 01 govern work under this Section.

1.3 SUBMITTALS:

1.3.1 Submittals shall be prepared in accord with the requirements of Division 01 and must include the following information:

a. Manufacturer's product data for each security sealant specified.

b. Provide descriptive literature, cut sheets, and performance data on any and all security sealants used to security equipment.

1.4 QUALITY ASSURANCE:

1.4.1 Materials under this specification shall be provided by one of the manufacturers listed. Security sealants by other manufacturers may be considered upon written approval of the Architect. Requests for substitutions shall include all pertinent technical data, descriptive product literature, and product specifications and must be received at least 7 days prior to the bid opening.

1.4.2 Prospective manufacturers shall be able to furnish materials that meet or exceed the requirements of specification. Manufacturers must be in good financial standing, and able to demonstrate that they have been actively engaged in the manufacturing of detention furnishings for a minimum of 5 years.

1.4.3 Upon receipt of request for substitution, the A/E will make an investigation to determine the ability of the manufacturer to perform the work. The A/E reserves the right to request additional information as deemed necessary for the determination process. Upon approval, the prospective manufacturer will be listed by addendum.

1.4.4 Unless specified otherwise, the following are approved manufacturers of security sealants:

a. Pecora Corporation – Harleysville, PA

b. BASF Construction Chemicals – Shakopee, MN

PART II – PRODUCTS

2.1 PICK RESISTANT SEALANT:

2.1.1 Manufacture/Series:
- a. Pecora Dynaflex SC
- b. Equal products by approved manufacturers also acceptable
  1. Meets Federal Specification TT-S-00230C, Type II, Class B
  2. Meets ASTM C-920-98, Type S, Grade NS, Class 12.5
  3. ASTM C661 Shore A Hardness: 55 +/-5
  4. ASTM D412 Tensile Strength: 250 psi
  5. ASTM D3660 VOC Content (g/L): 15

2.2 PICK PROOF SEALANT:

2.2.1 Manufacturer/Series:
- a. Pecora Dynapoxy EP-1200
- b. Equal products by approved manufacturers also acceptable
  1. Meets ASTM C-881, Type I and III, Grade 3, Classes B & C
  2. ASTM C661 Shore D Hardness: 70
  3. ASTM D695 Compression Strength: 11,000 psi
  4. ASTM D3960 VOC Base (g/L) Content: 0
  5. ASTM D3960 VOC Activator (g/L) Content: 0

PART III – EXECUTION

3.1 COORDINATION:

3.1.1 The SEC shall verify all job site conditions before installation begins.

3.2 INSTALLATION:

3.2.1 Install security sealant in accord with manufacturer's recommendations.

3.2.2 All surfaces must be clean, dry, and free of all foreign matter or contamination such as oil, grease, wax, bitumen, curing compounds, form-release agents, or other coatings.

3.2.3 Old caulking material should be removed from masonry joints by grinding or sawing to sound virgin substrates to insure optimum performance of the new sealant.

3.2.4 Metal surfaces must be free of rust, corrosion and protective coatings.

3.2.5 The SEC must be present on site prior to the installation of security sealants to coordinate proper placement, location, and setting with the Division 09 – Security Sealant Contractor.

3.2.6 All metal to metal masonry shall be completely filled and shall contain no cracks or seams that can be used for passage or storage of contraband.

3.2.7 Tool at once after application to ensure full adhesion.

3.3 CLEANING:

3.3.1 Clean all exposed surfaces according to manufacturer's instructions upon completion of project.

End of Section 08754