

PROJECT MANUAL

**HILL COUNTY
SHERIFF'S OFFICE
RENOVATION
406 HALL STREET
HILLSBORO, TX
76645**

Burns Architecture, LLC

JOB NO.: HCSO-19

DATE: 11/25/2019



11/25/2019

Architect



LAKEWAY, TEXAS

**SECTION 000102
PROJECT DIRECTORY**

**HILL COUNTY SHERIFF'S OFFICE RENOVATION
HILLSBORO, TEXAS**

November 25, 2019

COUNTY JUDGE

JUSTIN W. LEWIS

COUNTY COMMISSIONERS

PRECINCT 1

ANDREW MONTGOMERY

PRECINCT 2

LARRY CRUMPTON

PRECINCT 3

SCOTTY HAWKINS

PRECINCT 4

MARTIN LAKE

SHERIFF

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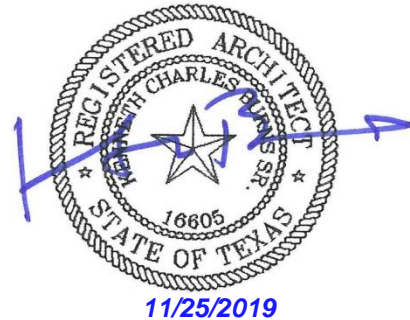
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**SECTION 011000
PROJECT DESCRIPTION**

**HILL COUNTY SHERIFF'S OFFICE RENOVATION
HILLSBORO, TEXAS**

The Hill County Sheriff's Office Renovation project is the renovation of approximately 1,100 square feet of space inside the existing Sheriff's office.

Construction materials and work required includes but is not limited to:

Minor concrete work, standard hollow metal frames and doors, standard door hardware, acoustical lay-in ceilings, acoustical wall treatments, architectural woodwork, VCT flooring and base, signage, electrical, mechanical, plumbing, miscellaneous metal fabrications, drywall, ceramic tile, and painting.

END OF SECTION

**SECTION 012100
ALLOWANCES**

PART 1 GENERAL

1.1. ALLOWANCE FOR PRODUCTS

- A. Purchase products under each Allowance as directed by Architect.
- B. Include the following amounts in bid, for materials only, for inclusion in contract sum:
 - 1. Hardware: Allow \$550 (Five Hundred Fifty Dollars) per door leaf for finish hardware on standard architectural doors. (Specification Section 081113)
 - 2. Data and phone cabling for county computer and phone systems: Allow lump sum of \$5,000 (Five Thousand Dollars).
- C. Amount of the Allowance includes:
 - 1. Net cost of product.
- D. In addition to amount of allowance, include in the base bid, for inclusion in base contract sum, cost for all other expenses required to obtain and complete the installation.

1.2. SELECTION OF PRODUCTS

- A. Architect shall:
 - 1. Consult with Contractor in considerations of products and supplies.
 - 2. Make selection, designate products to be used.
 - 3. Notify Contractor, in writing, designating:
 - a. Product model and finish
 - b. Accessories and attachments
 - c. Approved Supplier
- B. Contractor will:
 - 1. Assist Architect in determining qualified suppliers.
 - 2. Obtain proposals from suppliers.
 - 3. Make recommendations for consideration by Architect.
 - 4. Notify Architect of any effect anticipated by selection of product or supplier under consideration on:
 - a. Construction schedule
 - b. Contract sum
 - 5. On notice of approval, enter Purchase Agreement with designated supplier.

1.3. DELIVERY

- A. Contractor's responsibility:
 - 1. Arrange for delivery and unloading.
 - 2. Promptly inspect products for damage or defects.
 - 3. Submit claims for transportation damage.

1.4. ADJUSTMENT OF COSTS

- A. Do not exceed allowances without Architect's approval and Owner's authorization.
- B. Should actual approved purchase cost be more or less than specified amount of allowance, contract sum will be adjusted by change order equal to amount of differences.

END OF SECTION

**SECTION 055000
METAL FABRICATIONS**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work included: Provide miscellaneous metal work shown on the drawings, as specified herein, and as needed for a complete and proper installation.

1.2. QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Perform shop and/or field welding required in connection with the work of this Section in strict accordance with pertinent recommendations of the American Welding Society.

PART 2 PRODUCTS

2.1. MATERIALS

- A. In fabricating items which will be exposed to view, limit materials to those which are free from surface blemishes, pitting, rolled trade names, and roughness.
- B. Provide steel lintel angles.

2.2. SHOP PAINT

- A. Primer: Paint with one coat of fabricators standard red oxide primer.
- B. For repair of galvanizing, use a high zinc-dust content paint complying with MIL-P-21035.
- C. 2.0 mils dry film thickness required.

2.3. FABRICATION

- A. Except as otherwise shown on the Drawings or the approved Shop Drawings, use materials of size, thickness, and type required to produce reasonable strength and durability in the work of this Section.
- B. Fabricate with accurate angles and surfaces which are true to the required lines, and levels, grinding exposed welds smooth and flush, forming exposed connections with hairline joints, and using concealed fasteners wherever possible.
- C. Prior to shop painting or priming, properly clean metal surfaces as required for the applied finish and for the proposed use of the item.

- D. On surfaces inaccessible after assembly or erection, apply two coats of the specified primer. Change color of second coat to distinguish it from the first.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2. COORDINATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.

3.3. INSTALLATION

- A. General:
1. Set work accurately into position, plumb, level, true and free from rack.
 2. Anchor firmly into position.
 3. Where field welding is required, comply with AWS recommended procedures of manual shielded metal-arc welding for appearance and quality of weld and for methods to be used in correcting welding work.
 4. Grind exposed welds smooth, and touchup shop prime coats.
 5. Do not cut welded or abraded surfaces which have been hot-dip galvanized after fabrication and which are intended for bolted or screwed field connections.
- B. Immediately after erection, clean the field welds, bolted connections, and abraded areas of shop priming. Paint the exposed areas with same material used for shop priming.

END OF SECTION

**SECTION 064100
ARCHITECTURAL WOODWORK**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work included: Provide architectural woodwork where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- B. Details shown on the architectural drawings are intended to show the general requirements and are not meant to be all encompassing. Fabricator shall be responsible for fully detailing and supplying complete woodwork systems.

1.2. RELATED SECTIONS

- A. Section 123100 Manufactured Metal Casework.

1.3. QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Codes and standards:
 - 1. In addition to complying with pertinent codes and regulations of governmental agencies having jurisdiction, comply with "Quality Standards" of the Architectural Woodwork Institute for the grades specified.
 - 2. AWI certification and stamps will not be required.

PART 2 PRODUCTS

2.1. GENERAL

- A. Fabricate architectural woodwork to "premium grade" standards of the Architectural Woodwork Institute.
 - 1. AWI Section 400: Architectural cabinets.

2.2. CABINETS

- A. Fabricate cabinets in plastic laminate clad, flush overlay design cabinet, door and drawer fronts. Interior finish shall be white melamine.
- B. Wood Shelving: Wood shelving shall be fabricated from non-particle board plywood ready to receive stain or paint finish.
- C. Provide wood shelving extending into blind corners for full cabinet depth.
- D. At the mill, install finish hardware.
 - 1. All cabinet hinges shall be:
 - a. $\frac{3}{4}$ " thick doors - 1 pr. Stanley 1560 self-closing US26D.
 - 2. Handles: Wire pull hardware per TAS requirements equal to Stanley #4484, 4" centers, $1\frac{5}{16}$ " projection, US26D.

3. All drawer guides shall be - KV 1300.
4. Adjustable shelf hardware:
 - a. Cabinets - KV 255 and standards. KV and shelf supports. US26D at light stained wood, US10 at dark stained wood.
5. All other hardware shall be as shown on drawings or as required.

2.3. SOLID SURFACE COUNTERTOPS

- A. Manufactured from homogeneous solid sheets for filled plastic resin complying with materials and performance requirements of ANSI 124.3, for Type 5 or Type 6, without a pre-coated finish.
 1. Provide solid surfacing in colors and patterns selected by Architect from standard colors and patterns of the following manufacturers:
 - a. Formica
 - b. DuPont
 - c. WilsonArt
- B. Provide holes in countertops with plastic grommets to allow passage of electrical and computer cabling. Coordinate locations with Architect and Owner prior to field cutting countertops.

2.4. OTHER WOODWORK

- A. Miscellaneous shelving: Non-particle board plywood, ¾".
- B. Support brackets: Provide metal support brackets for countertop support as shown on the drawings. Brackets shall be sized to fully support the countertop while minimizing intrusion into the under counter knee space.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2. FIELD MEASUREMENTS

- A. Fabricate the work of this Section in strict accordance with the approved Shop Drawings and the referenced standards.

3.3. INSTALLATION

- A. Install the work of this Section in strict accordance with the approved Shop Drawings and the referenced standards, anchoring all items firmly into position.

END OF SECTION

**SECTION 072100
BUILDING INSULATION**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work Included:
1. Sound Control Insulation

1.2. PRODUCT HANDLING

- A. Protection:
1. Deliver materials to site; store in dry place with labels intact.
 2. Protect materials before, during, and after installation.
 3. Protect installed work of other trades.
- B. Replacements: In event of damage, make necessary repairs and replacements.

PART 2 PRODUCTS

2.1. BUILDING INSULATION

- A. Insulation shall be the product indicated or an equal approved in advance by the Architect.
- B. Sound control insulation shall be an un-faced product specifically designed to reduce sound transmission, equal to "Thermafiber Sound Attenuation Blankets", as manufactured by Owens Corning, 3 ½" thick at 3 ⅝" drywall, 2 ½" thick at 2 ½" drywall, 6" thick at 6" drywall, and 5" thick above ceilings. Provide in walls and above lay-in ceilings through-out the area of renovation.

2.2. ADHESIVE

- A. Adhesive: Type recommended by insulation manufacturer.

2.3. OTHER MATERIALS

- A. Fasteners, retainers or other materials not specifically described shall be as selected by Contractor and approved by Architect.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Inspection:
1. Prior to work of this Section, inspect installed work and verify that this installation may properly commence.

2. Verify that insulation may be installed in accordance with original design and manufacturer's recommendations.

B. Discrepancies:

1. In event of discrepancy, notify Architect.
2. Do not proceed until discrepancies have been resolved.

3.2. INSPECTION

- A. Verify that all insulation work is properly installed and complete.

END OF SECTION

**SECTION 079200
JOINT SEALANTS**

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This section includes joint sealants for the following locations:
1. Exterior joints in vertical surfaces and non-traffic horizontal surfaces as indicated below:
 - a. Joints between different materials.
 - b. Perimeter joints between existing masonry and frames of doors and windows.
 2. Interior joints in vertical surfaces and horizontal non-traffic surfaces as indicated below:
 - a. Tile control and expansion joints.
 - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, casework, and countertops.
 - c. Perimeter joints of plumbing fixtures.
 - d. Joints at intersection of existing masonry and new drywall.

1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that have been produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates.
- B. Provide joint sealants for interior applications that have been produced and installed to establish and maintain airtight continuous seals that are water resistant and cause no staining or deterioration of joint substrates.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed joint sealant applications similar in material, design and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.
- B. Single Source Responsibility for Joint Sealant Materials: Obtain joint sealant materials from a single manufacturer for each different product required.
- C. Preconstruction Compatibility and Adhesion Testing: Submit to joint sealant manufacturer(s) samples of materials that will contact or affect joint sealants for compatibility and adhesion testing.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instruction for multi-component materials.
- B. Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.6 PROJECT CONDITIONS

- A. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer or below 40°F.
 - 2. When joint substrates are wet.
- B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than allowed by joint sealant manufacturer for application indicated.
- C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with their adhesion are removed from joint substrates.

PART 2 – PRODUCTS

2.1 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
- B. Colors: Provide color of exposed joint sealants to comply with the following:
 - 1. Provide selections made by Architect from manufacturer's full range of colors for products of type indicated.

2.2 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing elastomeric sealants that comply with ASTM C 920 and other requirements indicated on each Elastomeric Joint Sealant Data Sheet at end of this Section, including those requirements referencing ASTM C 920 classifications for Type, Grade, Class, and Uses.
 - 1. Additional Movement Capability: Where additional movement capability is specified in Elastomeric Joint Sealant Data Sheet, provide products with the capability, when tested for adhesion and cohesion under maximum cyclic movement per ASTM C 719, to withstand the specified percentage change in the

joint width existing at time of installation and remain in compliance with other requirements of ASTM C 920 for Uses indicated.

- B. Products: Subject to compliance with requirements, provide one of the products specified in each Elastomeric Joint Sealant Data Sheet.

2.3 LATEX JOINT SEALANTS

- A. General: Provide manufacturer's standard one-part, non-sag, mildew-resistant, paintable latex sealant of formulation indicated that is recommended for exposed applications on interior locations and that accommodates indicated percentage change in joint width existing at time of installation without failing either adhesively or cohesively.
- B. Acrylic-Emulsion Sealant: Provide product complying with ASTM C 834 that accommodates joint movement of not more than 5 percent in both extension and compression for a total of 10 percent.
- C. Silicone Emulsion Sealant: Provide product complying with ASTM C 834 and, except for weight loss measured per ASTM C 792, with ASTM C 920 that accommodates joint movement of not more than 25 percent in both extension and compression for a total of 50 percent.
- D. Multi-Part Non-sag Urethane Sealant for Use NT: Type M, Grade NS, Class 25, and complying with the following requirements for Uses:
- E. Products: Subject to compliance with requirements, provide one of the following:
1. Acrylic-Emulsion Sealant:
 - a. "AC-20", Pecora Corp.
 - b. "Sonolac", Sonneborn Building Products Div., ChemRex, Inc.
 - c. "Tremco Acrylic Latex 834", Tremco, Inc.
 2. Silicone-Emulsion Sealant:
 - a. "Trade Mate Paintable Glazing Sealant", Dow Corning Corp.
 3. Multi-Part Nonsag Urethane Sealant for Use NT:
 - a. "Chem-Caulk 500", Bostik Construction Products Division
 - b. "Vulkem 227", Mameco International, Inc.
 - c. "Vulkem 922", Mameco International, Inc.
 - d. "Dualthane", W.R. Meadows
 - e. "Duynatrol II", Pecora Corporation
 - f. "Permapol RC-2", Products Research and Chemical Corporation
 - g. "SikaFlex-2c NC", Sonneborn Building Products Division, Rexnord Chemical Products, Inc.
 - h. "Dymeric", Tremco, Inc.

2.4 JOINT SEALANT BACKING

- A. General: Provide sealant backings of material and type that are non-staining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

- B. Plastic Foam Joint Fillers: Performed, compressible, resilient, non-staining, non-waxing, non-extruding strips of flexible plastic foam of material indicated below and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
 - 1. Closed-cell polyethylene foam, nonabsorbent to liquid water and gas, non-outgassing in un-ruptured state.
 - 2. Proprietary, reticulated, closed-cell polymeric foam, non-outgassing, with a density of 2.5 pcf (40 kg/cu.m.) and tensile strength of 35 psi (240 kPa) per ASTM D 1623, and with water absorption less than 0.02 g/cc per ASTM C 1083.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.5 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing material, free of oily residues or other substances capable of staining or harming in any way joint substrates and adjacent nonporous surfaces, and formulated to promote optimum adhesion of sealants with joint substrates.
- C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

2.6 DETENTION SECURITY SEALANT

- A. One or two part, tamper resistant polyurethane sealant to be used for all sealant and caulk locations inside the security perimeter except inside plumbing chases, staff areas and other areas inaccessible to inmates to include floor, wall, and ceiling control joints, concrete plank ceiling joints and jointing around dissimilar materials.
 - 1. Pecora "Dynapoxy EP-1200" inside all cells.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint sealant performance. Do not proceed with installation of joint sealants until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning Joints: Clean out joints immediately before installing joint sealants to comply with recommendations of joint sealant manufacturer.
- B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealant manufacturer based on preconstruction joint sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's recommendations. Confine primers to areas of joint sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint sealant manufacturer's printed installation instruction applicable to products and applications indicated, except where more stringent requirements apply.
- B. Installation of Sealant Backings: Install sealant backings to comply with the following requirements:
 - 1. Install joint fillers of type indicated to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - a. Do not leave gaps between ends of joint fillers.
 - b. Do not stretch, twist, puncture, or tear joint fillers.
 - c. Remove absorbent joint fillers that have become wet prior to sealant application and replace with dry material.
 - 2. Install bond breaker tape between sealants where backer rods are not used between sealants and joint fillers or back of joints.
- C. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability. Install sealants at the same time sealant backings are installed.
- D. Tooling of Non-sag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents that discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.
 - 1. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.

- a. Use masking tape to protect adjacent surfaces of recessed tolled joints.

3.4 CLEANING

- A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so that and installations with repaired areas are indistinguishable from original work.

3.6 JOINT SEALANT SCHEDULE

<u>Joint Sealers</u>	<u>Location Where Sealant is Applied</u>
One-Part Neutral Cure Silicone Sealant	Interior and exterior perimeter joints of metal frames in exterior walls.
One-Part Mildew-Resistant Silicone Sealant	Interior joints in vertical surfaces of ceramic tile in toilet rooms, and breakroom.
Acrylic-Emulsion Sealant	Interior joints in field-painted vertical and overhead surfaces at perimeter of hollow metal door frames; in gypsum drywall, drywall intersection with existing masonry; and all other interior joints not indicated otherwise.
Acoustical Sealant	Top, bottom, and control joints of interior partitions noted as sound walls.

END OF SECTION

SECTION 081113
STANDARD HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work included: Provide hollow metal doors, and metal door and window frames, which are not specifically described in other sections of these Specifications, where shown on the Drawings, as specified herein, and as needed for a complete and proper installation. Fully welded hollow metal frames shall be utilized for all standard doors.

1.2. QUALITY CONTROL

- A. Galvaneal materials shall conform to ASTM A653 / A653M-95 and ASTM A924 / A924M-95.

PART 2 PRODUCTS

2.1. METAL DOORS

- A. Type and design: Provide full-flush and full glass design, in dimensions and types shown on the Drawings, labeled or non-labeled as indicated on the Door Schedule, in 18 gage metal unless scheduled otherwise, properly reinforced for the finish hardware described in Division 8 of these Specifications.
- B. Finish: Pre-clean and shop prime each door for finish painting which will be performed at the job site under Division 9 of these Specifications.
- C. Exterior Doors: Form exterior doors and components from galvaneal steel.
- D. Acceptable products: Standard products of the Steelcraft manufacturing Company, Amweld Division of American Welding and Manufacturing Company, Ceco Corporation.

2.2. METAL FRAMES

- A. Type and design: Provide door and window frames of the types and dimensions shown on the Drawings, labeled or non-labeled as indicated on the Door/Window Schedule, in 16 gage metal unless scheduled otherwise, properly reinforced for the finish hardware described in Division 8 of these Specifications.
1. Schedule and size frames according to wall type conditions.
- B. Finish: Pre-clean and shop prime each frame for finish painting which will be performed at the job site under Division 9 of these Specifications.
- C. Exterior Frames: Form exterior frames and components from galvaneal steel.

2.3. FINISH HARDWARE

- A. Secure templates from the finish hardware supplier, and accurately install, or make provision for, all finish hardware at the factory.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- B. Materials of galvaneal shall receive one coat of primer appropriate for galvaneal materials prior to shipment.

3.2. INSTALLATION

- A. Placing frames:
 - 1. Where practical, place frames prior to construction of enclosing walls and ceiling.
 - 2. Set frames accurately into position, plumbed, aligned, and braced securely until permanent anchors are set.
 - 3. After wall construction is completed, remove temporary braces and spreaders leaving surfaces smooth and undamaged.
 - 4. At in-place construction, set frames and secure to adjacent construction with machine screws and suitable anchorage devices. Provide "z" fillers at each screw location.
 - 5. When installed in prepared openings in concrete or masonry construction, provide sealant between frame and concrete or masonry in accordance with provisions of Division 7 of these Specifications.

3.3. ADJUST AND CLEAN

- A. Final adjustments:
 - 1. Check and readjust operating finish hardware items in hollow metal work just prior to final inspection.
 - 2. Leave work in complete and proper operating condition.
 - 3. Remove defective work and replace with work complying with the specified requirements.
- B. Immediately after erection, sand smooth all rusted and damaged areas of prime coat, and apply touchup of compatible air-drying primer.

END OF SECTION

**SECTION 083113
ACCESS DOORS**

PART 1 GENERAL

1.1. SUMMARY

- A. This Section includes access doors for installation in the following types of construction:
 - 1. Gypsum board
 - 2. Masonry
- B. Provide painted steel access door where indicated, scheduled, or otherwise required for access to valves, junction boxes, etc. or required elsewhere in these specifications.

1.2. QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain access doors for entire project from one source from a single manufacturer.
- B. Size Variations: Obtain Architect's acceptance of manufacturer's standard size units, which may vary slightly from sizes indicated.
- C. Coordination: Furnish insets and anchoring devices that must be built into other work for installation of access doors. Coordinate delivery with other work to avoid delay.

1.3. PROJECT CONDITIONS

- A. Verification: Obtain specific locations and sizes for required access doors from trades requiring access to concealed equipment, and indicate on submittal schedule.
- B. Special-Size Access Doors: Use where required, requested or indicated on plan or in schedule.
- C. Rated Doors: Provide rated doors where located in walls and ceilings of rated assemblies.

PART 2 PRODUCTS

2.1. MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering access doors that may be incorporated in the work are:
 - 1. Bar-Co., Inc.
 - 2. Cesco Products
 - 3. J.L. Industries
 - 4. Karp Associates, Inc.
 - 5. Milcor, Inc.
 - 6. Nystrom, Inc.
 - 7. The Williams Brothers Corp.

2.2. MATERIALS AND FABRICATION

- A. General: Furnish each access door assembly manufactured as an integral unit, complete with all parts and ready for installation.

- B. Steel Access Doors and Frames: Fabricate units of continuous welded steel construction unless otherwise indicated. Grind welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panels to types of support shown. Provide minimum size of 24"×24" or as otherwise shown on the drawings. Field verify rough openings before fabrication. Provide shop drawing for each wall access door.
- C. Frames: Fabricate from 16-gage steel.
 - 1. Fabricate frame with exposed flange nominal 1-inch wide around perimeter of frame for units installed in the following construction:
 - a. Exposed masonry.
 - 2. For installation in masonry construction, furnish frames with adjustable metal masonry anchors.
- D. Flush Panel Doors: Fabricate from not less than 14-gage sheet steel, with concealed spring hinges or concealed continuous piano hinge set to open 175 degrees. Finish with manufacturer's factory-applied prime paint. Final painting by painting contractor.
- E. Hardware Set, Locking Devices:
 - 1. Provide one cylinder lock per access door. Furnish 2 keys per lock. Key all locks alike, unless otherwise scheduled.

PART 3 EXECUTION

3.1. INSTALLATION

- A. Comply with manufacturer's instructions for installation of access doors.
- B. Coordinate installation with work of other trades.
- C. Set frames accurately in position and securely attach to supports with face panels plumb or level in relation to adjacent finish surfaces.

3.2. ADJUST AND CLEAN

- A. Adjust hardware and panels after installation for proper operation.
- B. Remove and replace panels or frames that are warped, bowed, or otherwise damaged.

3.3. ACCESS DOOR SCHEDULE

- A. Provide and install access doors in masonry and drywall for access to plumbing valve chases or any other plumbing fixtures requiring maintenance or access where a standard size door is not provided and for electrical devices located above drywall requiring access. Refer to mechanical and electrical drawings and specifications for related plumbing and electrical work and locations of such work. Provide doors as required for complete access.
- B. Provide and install access doors in masonry and drywall at plumbing chases. Set bottom of doors minimum of 2'-0" A.F.F. if not shown on drawings or not in conflict with another item.

END OF SECTION

**SECTION 087100
STANDARD DOOR FINISH HARDWARE**

PART 1 GENERAL

1.1. DESCRIPTION

A. Work included:

1. Propose and furnish finish hardware required to complete the work as shown on the drawings as specified herein, and/or as required for a complete and functional installation. Refer to Section 012100 Allowances for pricing information.
2. Furnish trim attachments and fastenings, specified or otherwise required, for proper and complete installation.
3. Deliver to the job site those items of finish hardware scheduled to be installed at the job site, and deliver to other points of installation those items of finish hardware scheduled to be factory installed.

B. Related work:

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
2. Installation of finish hardware is described in other Sections of these Specifications.
3. The following hardware is listed elsewhere in these specifications and shall not be a requirement of this division.
 - a. Cabinet Hardware
 - b. Locker Hardware
 - c. Toilet Partitions
 - d. All Rough Hardware
 - e. Transformers, Junction Boxes, Wire and Hook-up of Electrical Detectors
 - f. Shelf Hardware

1.2. QUALITY ASSURANCE

- A. Hardware has been specified herein by manufacturer's name, brand, and catalog numbers for the purpose of establishing a basis of quality, finish, design, and operational function. Finish of all hardware shall be uniform in color/appearance.
- B. To insure a uniform basis of acceptable materials, it is the intention that only manufacturer's items specified as "Acceptable and Approved" be furnished for use on this project.
- C. Items specified "NO SUBSTITUTION" shall be provided exactly as listed in this specification and/or in the door/window schedule.
- D. Deviation from or modification of items will be permitted only for special instances caused by reason of construction characteristics and for the purpose of providing proper operational function. The Contractor shall be responsible for checking any necessary deviations in order that hardware shall fit and function properly.
- E. Substitutions: Products equal to those specified may be substituted.

- F. Supplier: A recognized builder's hardware supplier who has been furnishing hardware not less than two (2) years, and who is, or has in employment, an Architectural Hardware Consultant (AHC) in good standing as certified by the Society of Architectural Hardware Consultants Council.

1.3. REFERENCES

- A. Listed Hardware: Hardware, which is to be installed in or on fire, labeled doors and frames, Class A or lesser, single or pairs, shall be tested and listed by Underwriters Laboratories (UL). Exit devices which are to be used as panic hardware shall be tested and listed in Underwriters Laboratories "Accident Equipment List - Panic Hardware."
- B. All listed hardware shall be in compliance with the following:
 - 1. NFPA 80 – Standards for Fire Doors and Windows
 - 2. NFPA 101 – Life Safety Code
 - 3. Local authorities having jurisdiction.
 - 4. Texas Accessibility Standards

1.4. SUBMITTALS

- A. Comply with pertinent provisions of Division 1.
- B. The finish hardware supplier shall, after award of a formal contract, submit to the Architect complete typewritten copies of the proposed finish hardware schedule with manufacturer's cut sheets for approval. This schedule shall be prepared using the "Sequence and Format for the Hardware Schedule" as approved and recommended by the Door and Hardware Institute (DHI). After approval of the schedule, the hardware supplier shall provide copies of this approved schedule to the Architect for file and distribution purposes. Hardware will not be ordered by the hardware supplier until an approved schedule has been received. The cost for this service shall be included with the cost of materials at the time of bidding.
- C. Samples: As part of this contract, provide to the Architect if requested, one sample of each item of finish hardware that is to be furnished for this project. These samples will be held by the Architect until completion of the project.

1.5. PRODUCT HANDLING

- A. Comply with pertinent provisions of Division 1.
- B. Individually package each unit of finish hardware, complete with proper fastenings and appurtenances, clearly marked on the outside to indicate contents and specific locations in the work.
- C. All items of hardware to be delivered to the job site shall be completely packaged with all necessary screws, bolts, miscellaneous parts, instructions and where necessary installation templates for manufacturer's suggested installation. They are to be clearly labeled so as to conveniently identify them and their intended location in the building.
- D. A representative of the General Contractor shall receive the hardware delivered at the job site. A dry locked storage place complete with shelving, shall be set aside for the purpose of unpacking, sorting out, checking and storage.

- E. Finish hardware shall be delivered to the General Contractor by the hardware supplier. Direct factory shipments to the job site are not acceptable.
- F. The hardware shall be jointly inventoried by representatives of the General Contractor and the hardware supplier.
- G. All hardware shall be handled in a manner to minimize marring, scratching, or damage.
- H. Items damaged in shipment shall be replaced promptly and with proper material without additional cost to the Owner.
- I. Hardware supplier will coordinate with access control systems supplier and detention hardware supplier to provide adequate keying and electrically compatible devices.

1.6. WARRANTY

- A. The finish hardware shall carry a limited warranty against defects in workmanship and operation for a period of one year from date of substantial completion. No liability is to be assumed where damage of faulty operation is due to abuse, improper usage, improper installation, or failure to exercise normal maintenance.

PART 2 PRODUCTS

2.1. MATERIALS

- A. Hinges: Ball bearing, full mortise hinges as specified. Approved manufacturers are Ives, Hager, Stanley, or McKinney. Provide 3 hinges per door leaf for doors up to 36” in width, provide 4 hinges per door leaf for doors over 36” in width.
- B. Continuous Hinges: Provide continuous aluminum geared type hinges of the type and function specified in the hardware sets. Hinges shall be machined for bearings prior to anodizing.
- C. Cylindrical Locksets: Single lock chassis shall accommodate 1¾" to 2¼" thick doors and be non-handed. Lockset shall have separate anti-rotation through bolts, and shall have no exposed mounting screws. When the outside lever is locked, it shall rotate freely and it shall return to its horizontal position when released. All cylindrical locksets shall heavy duty grade one (1). Remodel projects lock/latches shall match existing locks/latches and keying.
 - 1. Acceptable Manufacturers: Typical Functions (Other functions available)
 - a. Entrance Lockset

1)	Best	93KAB 15D LM
2)	Schlage	ND92 RHO
3)	Sargent	FW-10G05 L
 - 2. Privacy Lockset

1)	Best	93K L 15D
2)	Schlage	ND40S RHO
3)	Sargent	10U15 L 15D
 - 3. Storeroom Lockset

1)	Best	93KD 15D LM
2)	Schlage	ND96 RHO
3)	Sargent	FW-10G04 L 15D

4. Passage Latchset
 - 1) Best 93KN 15D
 - 2) Schlage ND10S RHO
 - 3) Sargent 10U65 L 15D

D. Exit Devices: Provide push-pad type exit device with stainless steel overlapping "T" style touchpad to prevent pinching of fingers. For safety, touch pad shall not extend full length of device. Provide heavy duty forged steel escutcheon and solid forged lever or pull trim at exterior locations. As specified in hardware sets. Provide style and functions as specified in hardware sets. Lever trim to match locksets and latchsets at interior locations. When the outside lever is locked, it shall rotate freely and it shall return to its horizontal position when released.

1. Acceptable Manufacturers:
 - a. Stanley phi 2000 series x 630 Stainless Steel
 - b. Von Duprin 98 series x 630 Stainless Steel
 - c. Sargent 80 series x 630 Stainless Steel
2. Electric Exit Devices required shall be of the same manufacturer as all exit devices.
 - a. Provide Power Transfer and Power Supply as required for hardware sets.

E. Closers: Provide non-handed, non-sized cast iron or aluminum body door closers with steel piston and O-ring compatible. Regular and parallel arm mounting or top jamb where indicated in hardware sets. Furnish all required brackets, spacers, and plates. Mount closers out of line of site (nonpublic side). Rack and pinion construction with compression spring, fully hydraulic. Closing and latching controlled by independently operated valves. Pressure relief valves not allowed. Adjustable spring power allowing adjustment up to 50 percent in field to suit individual door conditions. Adjustable back-check for interior and exterior units. Provide standard hold open on non-rated doors. Labeled closers required at all rated openings. Closers exposed to inmates shall be concealed.

1. Acceptable Manufacturers: Concealed Closer
 - a. LCN 2011 Finish to match other hardware.
 - b. Norton 7900 Finish to match other hardware.
2. Acceptable Manufacturers: Surface Closer
 - a. LCN 4040 Finish to match other hardware.
 - b. Norton 7700 Finish to match other hardware.
 - c. Stanley Comm. QDC100 Finish to match other hardware.
3. Acceptable Manufacturers: Concealed Surface Security Closer at all doors inside security perimeter where closer is exposed to inmates.
 - a. LCN 2030 Series
 - b. Norton 7900 Series

F. Push Pull Bars: Provide ANSI J504, .1" Dia. Pull and push bar. Provide proper fasteners for door construction.

1. Acceptable Manufactures
 - a. Trimco
 - b. Ives
 - c. Hager

- G. Protection Plates: Provide kick, push and armor plates of 0.050-inch thick stainless steel with flat countersunk , tamper resistant screws. Coordinate plates with exit devices and sound seals. Provide where noted on door schedule. Install on push side.
1. Acceptable Manufacturers:
 - a. Ives
 - b. Trimco (Triangle Brass)
 - c. Hager
 2. Armor plates shall be 48” high x door width at locations inside the jail secure perimeter.
 3. Kick plates shall be 8” high x door width at locations outside the jail secure perimeter.
- H. Stops: Provide wall stops of stainless steel. Provide fasteners of the type required for each particular wall construction. Provide stainless steel overhead stops at all locations where wall stops cannot be used. Do not use floor stops.
1. Acceptable Manufacturers: Wall Stops
 - a. Ives WS407 x 630
 - b. Trimco 1270 x 630
 - c. Hager 234W x 630
 2. Acceptable Manufacturers: Overhead Stops (where wall stops are not feasible)
 - a. Concealed:
 - b. Rixson Firemark No. 1 Series x 630
 - c. ABH 1000 Series x 630
 - d. Glynn Johnson 100 Series x 630
 3. Acceptable Manufacturers: Overhead Stops (where concealed overhead stops are not feasible)

Surface:

 - a. Rixson Firemark No. 9 Series x 630
 - b. ABH 9000 Series x 630
 - c. Glynn Johnson 90 Series x 630
- I. Electronic Access: Bored locks, mortise locks, and exit device trim. Device to have the ability to be Network adaptable without removing device from door. Device to have ability to change credential reader technologies without being removed from door. Furnish devices with field configurable functions classroom/storeroom 70, apartment 60, office 50, privacy 40 without being removed from door. (None this project)
- a. Schlage Electronics AD Series
 - b. Best Access systems WIQ 93K Series
- J. Electric Strikes
1. Provide electric strikes as required.
 - a. For Exit Devices – HES 9500 or 9600 as required
 - b. Trine equivalent
 - c. For Locksets – HES Type as required.
 - d. Trine Equivalent
- K. Thresholds: Provide type, style, profile, and thickness of thresholds as specified in hardware sets or as required for labeled openings or smoke enclosures. Thresholds shall be manufactured by National Guard Products, or Zero.

- L. Sound Seals: Provide exact units as specified in hardware sets and as manufactured by Zero or National Guard Products depending on each individual hardware set.
- M. Provide all wiring diagrams for all electric operated hardware supplied under this section. Coordinate electric hardware with other trades involved with installation.
- N. Security Fasteners: Provide center pin, tork head fasteners for all exposed connections located within the secure perimeter of this facility.

2.2. KEYING

- A. Keying: Key system shall be per Owner's instructions. Provide biting list direct to Owner's representative from manufacturer, no exceptions.
- B. Keying Schedule: Submit separate detailed schedule for owners review after hardware schedule has been approved by Architect.
- C. Consult with owner and key all locks and cylinders as instructed. Furnish visual key control and stamp all keys as instructed.
- D. Provide all locksets and cylinders construction keyed for this project with change out of cylinders for Owner's use at substantial completion.
- E. All keys to be of nickel silver material in following Quantities:
 - 1. Construction Master Key: Five (5)
 - 2. Grand Master Keys / Master Keys: Three (3)
 - 3. Change Keys per Lock:
 - a. Two (2)
 - b. One additional key for each lock type to be placed in control room key cabinet.

2.3. FINISH

- A. Finish Hardware shall be as follows: Unless noted otherwise in hardware sets.
 - 1. Hinges: Exterior US32D (630) Interior US26D (626)
 - 2. Locksets: US26D (626)
 - 3. Exit Devices: US32D (630)
 - 4. Door closers: Spray Painted to match other hardware: (689)
 - 5. Protection Plates: US32D (630)
 - 6. Over Head Stops: US32D (630)
 - 7. Misc. Flatgoods: US32D (630) or US26D (626)

PART 3 EXECUTION

3.1. EXAMINATION

- A. Verify that doors and frames are ready to receive work and dimensions are as instructed by the manufacturer.
- B. Verify that electric power is available to power operated devices and is of the correct characteristics.

3.2. INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions.
- B. Use templates provided by hardware item manufacturer.
- C. Mounting heights for hardware from finished floor to center line of hardware item refer to:
 - 1. DH WDMS.3.
 - 2. DHI A115 Series.
 - 3. Texas Accessibility Standards.

3.3. FIELD QUALITY CONTROL

- A. Architectural hardware supplier will inspect installation and certify that hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.
- B. Change out construction cylinders for owner occupancy at substantial completion of project.

3.4. ADJUSTING

- A. Adjust hardware for smooth operation.

3.5. PROTECTION OF FINISHED WORK

- A. Do not permit adjacent work to damage hardware or finish.

3.6. FINISH HARDWARE SCHEDULE

- A. Furnish each door leaf with hardware items similar to scheduled sets below. Provide size, type, and quality as specified in Part 2. Furnish specific function or component as scheduled below or as required to function with all specific door details. Additionally, supplier shall provide any other hardware or accessories necessary for the door to perform as intended.

SH-1 Offices

- Office Lock Set
- Butts
- Silencers
- Closer
- Stop

SH-2 Individual Toilet Room

- Privacy Lock Set
- Butts
- Silencers
- Closer
- Stop

SH-3 Passage Set

- Passage Set
- Butts
- Silencers
- Stop

SH-4 Storeroom – Pair

- Store Room Lock Set
- Butts
- Silencers
- Stop
- Closers
- Floor and Head Bolts

SH-5 Entrance

Door Lock
Butts
Exit Device
Pull
Closer
Stop
Threshold at Exterior
Weatherstrip at exterior
Bottom drip/sweep at exterior

END OF SECTION

**SECTION 092900
DRYWALL**

PART 1 GENERAL

- A. Standard Provisions, conditions of the Contract and Division 1, as indexed, apply to this section.

1.1. DESCRIPTION

- A. Furnish all labor, materials, equipment and services for a complete installation of all drywall work as shown on the drawings and as hereinafter specified, including, but not limited to, the following:
1. All metal stud framing for interior partitions.
 2. All metal framing for all drywall furrings, ceilings, soffits, etc.
 3. All bracing required, specified, or detailed for all walls and partitions.
 4. All metal trim detailed or required where interior partitions intersect exterior walls.
 5. All gypsum board and cementitious backer board.
 6. All expansion joints located in drywall.
 7. All other accessories implied or required.
 8. All metal stud framing and suspension system for gypsum board ceilings.
 9. All drywall joint treatment, tape, bed, float finish. (Finished wall texture by painter)
- B. Refer to Specification Section 083113 for access doors provided by others to be installed by drywall sub-contractors.
- C. Comply with all current gypsum board manufacturers and IBC code requires for mold prevention and proper installation requirements.

PART 2 PRODUCTS

2.1. MATERIALS

- A. Gypsum board:
1. $\frac{5}{8}$ " thick "Firecode" gypsum board, 48" wide, tapered edge, lengths as required or scheduled.
 2. Provide water-resistant type "W/R" or cementitious backer board in rooms where moisture is present.
- B. Metal drywall studs and track: Formed from hot-dipped galvanized steel with a minimum yield strength of 40,000 psi, and a minimum G60 coating.
1. All exterior metal studs: Refer to structural.
 2. Interior metal stud partitions:
 - a. 6" interior studs and track, galvanized
600S125-27 @16" O.C. up to 19'
600S125-30 @16" O.C. up to 20'
600S125-43 @16" O.C. up to 22'-6"
600S125-45 @16" O.C. up to 24'-6"

600S125-54 @16" O.C. up to 26'-6"

- b. 3 $\frac{5}{8}$ " interior studs and track: 25 gauge, galvanized
 - c. 2 $\frac{1}{2}$ " interior studs and track: 25 gauge, galvanized
 3. Provide expansion track at metal stud partitions which extend to structure or roof deck.
- C. Furring channels: Standard gauge, roll formed, electro galvanized steel, size as required.
- D. Metal intersecting wall trim: 16 gauge, formed to shape detailed, with sharp corners to fit snugly over partition end.
- E. Screws: USG, 1" and 1 $\frac{1}{4}$ " self-drilling drywall screws, Type S-12, bugle head, cadmium, or zinc plated.
- F. Trim: USG Dur-A-Bead at all exterior corners and at all other locations detailed.
- G. Control joints: USG control joint #093. Provide at all door, window, and wall openings each side of wall, full height of wall.
- H. Mastic: "Bestile" as manufactured by Manville Co.
1. Hanger Wire - No. 12 gauge galvanized wire.
- I. Ceiling and Soffit Framing System:
1. Chicago Metallic 630 Drywall Furring System.
 2. Project Conditions / Environmental Requirements:
 - a. Verify weather-tightness of area to receive suspension system prior to installation.
 - b. Wet trades work to be thoroughly dry and complete prior to installation.
 - c. Installation to begin only when temperature and humidity conditions closely approximate interior conditions which will exist when area is complete and occupied.
 - d. Heating and air conditioning systems to be operating prior to, during, and after installation.
 3. Maintenance: Furnish additional material equal to 2 percent of ceiling area.
 4. Suspension System Components:
 - a. Main Runners:
 - (1) Manufactured from 0.024 inch thick, $\frac{15}{16}$ inch wide by 1 $\frac{1}{2}$ inches high by 144 inches long with factory punched furring channel slots, cross tee slots, hanger holes, and integral bayonet-style and couplings.
 - (2) Coated with factory-applied baked-on enamel paint finish.
 - b. Furring Cross Channels:
 - (1) Manufactured from 0.020 inch thick steel 1 $\frac{3}{8}$ inch wide by $\frac{7}{8}$ inches high by 48 inches long with knurled faced and straight locking end tabs.
 - c. Cross Tees:

- (1) Manufactured from (0.024) inch thick steel $\frac{15}{16}$ inch wide by $1\frac{3}{8}$ inches high by (48) inches long with integral snap grid end couplings, factory punched cross tee slots, and hanger holes.
 - (2) Coated with factory-applied baked-on enamel paint finish.
- d. Wall Track:
- (1) Manufactured from 0.020 inch thick steel ($1\frac{5}{8}$) inches high by 120 inches long with a 1 inch top and bottom flange.

2.2. DELIVERY AND STORAGE

- A. Deliver all materials to the job site in original unopened containers or bundles bearing the brand name of the manufacturer.
- B. Building shall be completely enclosed prior to delivery of gypsum board. Board shall be neatly stacked flat, with first sheet elevated minimum $1\frac{1}{2}$ " above floor.

PART 3 EXECUTION

3.1. INSTALLATION OF WALL AND PARTITION FRAMING

- A. General Requirements: Install steel stud system in accordance with manufacturer's published or written instructions and recommendations to meet required structural criteria. Frame both sides of expansion and control joints, as shown for the wall system, with separate studs and do not bridge the joint with components of the stud system.
- B. Track:
 1. Align track accurately at floor and anchor to concrete with approved power driven fasteners spaced not more than 24" o.c.
 2. Locate top track as follows:
 - a. Interior Partitions: Align top track 4" above highest scheduled ceiling height where partition occurs. Brace all track to building framing members at 48"o.c., staggered where possible, utilizing metal stud sections screwed to track and screwed or anchored to building structure with power driven fasteners.
- C. Studs shall be spaced no greater than 16" o.c.
 1. Position all studs vertically in the runners. Anchor studs to bottom and top track as follows:
 - a. Interior Partitions: Screw attachment of stud to track is not required, except at corners, door or window openings, partition intersections, etc.
 2. Studs at jambs - Locate studs no more than 2" from all door frame jambs, abutting partitions, partition corners, and other construction.
 3. Install double studs at all door jambs and at leading edge of all wing walls.
- D. Miscellaneous - frame head and sill of openings through partitions with cut to length section of track, screw attached through overlapping flanges into adjacent studs.

3.2. INSTALLATION OF CEILING, FURRING AND SOFFIT FRAMING

A. Installation – Non-Fire-Rated System:

1. Main Runners: Installed 48 inches on center, by direct suspension from existing structure, with not less than 12 gage hanger wires spaced 48 inches on center along main runner length. Wrap hanger wires tightly 3 full turns at each end.
2. Furring Tees Cross Channels: Installed perpendicular to main runners 24 inches on center to form 2' x 4' modules.
3. Cross Tees: Installed adjacent to each unsupported side of recessed fixtures.
4. Wall Track: Installed on vertical surfaces, intersecting suspension components, by appropriate method in accordance with industry-accepted practice.
5. Additional Hanger Wires: Wrapped tightly 3 full turns to structure and component at locations where imposed loads could cause deflection exceeding 1/360 span.

B. Installation – Fire-Rated System:

1. Suspension System Components: Installed in accordance with U.L. design number guidelines.

3.3. GYPSUM BOARD ERECTION

- A. In cold weather, during the application of gypsum board, the building shall be heated to maintain a uniform temperature in the range of 55 to 70 degrees and ventilated to eliminate excessive moisture.
- B. Apply gypsum wallboard of proper type with long dimensions parallel to studs. All abutting ends and edges shall occur over stud or channel flanges. All end joints shall be neatly fitted and staggered. No butt joints will be allowed in wall surfaces with a ceiling height of 12' or less. Joints on opposite sides of partitions shall be arranged to occur on different studs. Where possible, board shall extend full height and be attached to runner of each partition. Stagger edge and end of face layer of gypsum board. Fasteners for attachment to metal studs shall be spaced a maximum of 24" o.c. for base layer and 16" o.c. for face layer of two layer partitions. For single layer applications, fasteners shall be spaced 12" o.c. in the field of the board and 8" o.c. staggered along the vertical abutting edges.
- C. Apply material for ceilings and furrings of maximum practical length with the long dimension at right angles to the furring channel. Fasten at 12" o.c. in the field of the board and along abutting ends. All abutting ends or edge joints shall occur over the web surface of furring channel and shall be fitted neatly around all cut-outs and openings. Use board of maximum practical lengths. All ceiling material shall abut wall material.
- D. Screws shall be power driven with an electric screw driver and screw heads shall provide a slight depression below the surface of the wall board. Fasteners shall not be driven closer than 3/8" from edges of the board.
- E. All chase walls shall be constructed following implicitly the recommended approved procedures of the United States Gypsum Company, supplemented by the details on the drawings.

3.4. DRYWALL JOINT TREATMENT AND FINISH

- A. All treatment of jointing and finish shall be of standard practice and shall conform to standards of the Gypsum Association and the American Society for Testing and Materials (ASTM).

3.5. ACCESSORIES

- A. Furnish and install accessories as directed and as required.
- B. Apply corner bead at all exterior corners. Exposed edges and ends of all board abutting other materials (i.e. masonry) except at floor, shall be treated with metal casing trim.
- C. In all rooms with a scheduled ceiling height of less than 12'-0", install control joints from top corner of each door or borrowed light frame not extending to ceiling, on both sides of frame, and both sides of partition (4 per door or borrowed light). Control joint shall align with outer edge of frame and extend minimum 2" above scheduled ceiling or to top of furring.
- D. Install expansion joints, control joints, edge beads, and miscellaneous accessories, where indicated on the drawings or as otherwise required by standard practice. All accessories shall be adequately anchored by screw attachment to steel framing back-up to prevent displacement.

END OF SECTION

**SECTION 093013
CERAMIC TILE WORK**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Tile floors, walls, base and splashes.

1.2. QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Provide manufacturer's Master Grade Certificate stating type and location of each tile material in this Section.

1.3. SAMPLES

- A. Submit samples of each type of material specified to the Architect for approval.

1.4. COORDINATION

- A. Coordinate with other trades whose work affects, connects with, or is concealed by tile installations. Before proceeding, make certain all required inspections have been made.

1.5. DELIVERY AND STORAGE

- A. Deliver all manufactured materials in original, unbroken containers bearing name of manufacturer, brand, and grade seals. Keep materials dry, clean and protected against deterioration in any form.

1.6. PREPARATION AND ACCEPTANCE OF SURFACES

- A. All surfaces to receive tile work shall be clean and free of dirt and debris, oil, grease, paint, curing compounds, or other material that would affect the bond. Concrete subfloor shall be a smooth plane. All subfloor adjacent to the floor drains shall slope uniformly to drains, and top of drains shall be installed level with tile surface. The drains shall also be installed such that no water will pond on the completed surface. All imperfections shall be corrected by approved methods prior to commencing the application.
- B. Examine materials to ascertain compatibility of material with installation method specified.
- C. Report to the Architect any and all conditions that might adversely affect the work herein and thereby preclude ability to deliver the "highest class" job. No waiver of responsibility for incomplete, inadequate, and defective underlying work will be considered unless notice of such unsatisfactory condition has been filed and acceded to, in writing, by the Architect before the Contractor begins any part of the work.

1.7. STANDARDS

- A. Conform with all applicable requirements of the American Standards Association Specifications (A108 Series) and the "Handbook for Ceramic Tile Installation" of the Tile Council of America. Have tile bear the seal of the Tile Council of America, Inc. and be equal to or exceed Standard Grade. Have all tiles set by expert journeymen tile setters.

PART 2 PRODUCTS

2.1. MATERIALS

Materials listed shall establish the type, level of quality, and price range to be included in the contractor's bid. The owner reserved the right to substitute different tile that falls within the established price range.

- A. Tile and Accessories:
1. Floor tile at restrooms shall be equal to American Olean, 2"×2" Porcelain.
 - a. Maximum of 2 colors may be selected by Architect.
 - b. Acceptable Manufacturer: American Olean or Equal.
 2. Wall tile at restrooms and splash shall be equal to American Olean, Bright, Field Tile 4 ¼" x 4 ¼" ceramic.
 - a. Maximum of 2 colors may be selected by Architect.
 - b. Acceptable Manufacturer: American Olean or Equal.
 3. Solid surface thresholds shall be equal to Corian or Wilsonart products. Provide at each restroom.
 4. Provide corner trim at all outside corners of walls.
 - a. Acceptable manufacturer: Schluter Systems
 - b. Product: Rondec, anodized aluminum
- B. Provide manufacturer's Master Grade Certificate stating type and location of each tile material in this Section.
- C. Portland cement: Shall be standard brand complying with ASTM C-150.
- D. Lime: Type S.
- E. Water: Clean and free of deleterious materials.
- F. Sand: Complying with ASTM Standards.
- G. Bond Coat
1. All floors and base: Portland cement paste on a plastic bed; L&M Surco "Polycrete", or equal, latex - Portland cement on a cured bed or for thin-set applications.
- H. Grout
1. All floors: L&M Surco "Acid-R", colored.
 2. Use grout with sealer within grout mix.

2.2. SETTING BED MIXTURE (BY VOLUME)

- A. Comply with pertinent recommendations contained in the Tile Council of America "Handbook for Ceramic Tile Installation" 2002 Edition (or latest edition). Method F-122-02 for flooring material, and method W-243-02 and W-242-02 for wall materials.

2.3. SETTING AND GROUTING

- A. All materials and workmanship shall be in strict accordance with the currently accepted installation practices of the Domestic Tile Industry, published by the Tile Council of America, Inc. Other installation specifications, as issued by the manufacturer of the setting material or as indicated herein shall be implicitly followed. Refer to other sections of specifications for preparation of walls or surfaces to receive tile.
 - 1. All other floors: Tile Council Installation Method F113-89.
 - 2. All walls and base with masonry backup: Tile Council Installation Method W-202-89.
 - 3. All other walls and bases: Tile Council Installation Method - W242-89 utilizing organic adhesive on gypsum board.
- B. Work shall be carefully laid out in an endeavor to center the tile and to avoid small cuts. All cuts shall be rubbed smooth and even. Wall and base tile shall be flush at their meeting point.
- C. Grouting: Mix and/or apply in strict accordance with manufacturer's recommendations, thoroughly forced into all joints so that the joint is filled to its entire depth. All inside corners at wall intersections shall be filled flush with approved sealant matching grout color.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2. INSTALLATION

- A. General:
 - 1. Comply with ANSI A108.1, ANSI A108.2, and the "Handbook for Ceramic Tile Installation" of the Tile Council of America, except as otherwise directed by the Architect or specified herein.
 - 2. Maintain minimum temperature limits and installation practices recommended by materials manufacturers.
- B. Limits of Tile:
 - 1. Extend tile into recesses and under equipment and fixtures to form a complete covering without interruptions.

2. Terminate tile neatly at obstructions, edges, and corners, without disruption of pattern or joint alignment.
- C. Joining Pattern:
1. Lay tile in grid pattern unless otherwise indicated on the drawings or directed by the Architect. Notify Architect prior to beginning lay-out.
 2. Align joints when adjoining tiles on floor, base, trim, and walls are the same size.
 3. Layout tile work, and center the tile fields both directions in each space or on each wall area.
 4. Adjust to minimize tile cutting.
 5. Provide uniform joint widths.
- D. Provide expansion and control joints where occur in concrete slab, and where otherwise recommended by the "Handbook for Ceramic Tile Installation" of the Tile Council of America.
- E. Install solid surface thresholds at doors or openings where ceramic tile meets a dissimilar floor finish. Solid surface thresholds are not required where metal weather thresholds are to be installed.
- F. Cleaning:
1. Upon completion of placing and grouting, clean the work of this Section in accordance with recommendations of the manufacturers of the materials used.
 2. Protect metal surfaces, cast iron, and vitreous items from effects of acid cleaning.
 3. Flush surfaces with clean water before and after cleaning.
- G. Provide tile surfaces clean and free from cracked, broken, chipped, un-bonded, and otherwise defective units.
- H. Provide required protection of tile surfaces to prevent damage and wear prior to acceptance of the work by the Owner.
- I. Provide consistent slope across areas shown on the drawings as floor slopes and slope to drains.

3.3. CLEANING AND PROTECTION

- A. Wipe surfaces clean after grouting; remove all traces of mortar and grout. Do not use acid solution for cleaning glazed tile.
- B. Close spaces to traffic or other work until tile is firmly set. Protect from damage until acceptance. Repair all damaged work at no additional cost to Owner.

END OF SECTION

**SECTION 095123
SUSPENDED PANEL CEILINGS**

PART 1 GENERAL

- A. Standard Provisions, Conditions of the Contract and Division 1, as indexed, apply to this section.

1.2. DESCRIPTION

- A. Furnish all materials, labor, equipment, and services for the complete installation of suspended panel ceilings, as scheduled and detailed on the drawings, and hereinafter specified.

1.3. WORK NOT INCLUDED

- A. All phases of electrical work. Electrical fixtures shall be supported in the ceiling system with hangers and accessories provided by the electrical contractor.
- B. All phases of the air conditioning and ventilation work. Location of the mechanical systems shall be coordinated with and complimentary to the ceiling system and the electrical fixtures. Support of the mechanical systems shall be independent from the ceiling and provided by the mechanical contractor.

1.4. COORDINATION

- A. Work hereunder requires coordination with trades whose work connects with, is affected by, or is concealed by this work. Before proceeding, make certain all required inspections have been made.

1.5. SAMPLES

- A. Submit samples of each type of material specified to the Architect for approval.

1.6. INSPECTION

- A. The ceiling contractor shall be responsible for the examination and acceptance of all surfaces and conditions affecting the proper installation of his materials. Commencement of work will constitute acceptance of surfaces.

1.7. DELIVERY AND STORAGE

- A. Deliver all manufactured materials in original containers bearing manufacturer's name and brand. Use only one brand and one lot number for each type of unit through job. Store materials within building in locations directed by General Contractor.
- B. Extra Stock - Provide one extra unopened carton of each type lay-in panel and store at site at a location directed by the Owner.

1.8. APPLICATOR

- A. The installation shall be made by a contractor approved by the manufacturer of the products used.

1.9. JOB CONDITIONS

- A. All wet work shall be completed and dried out to the satisfaction of the Architect before work is started. No work shall begin until building is enclosed and temperature and humidity are controlled.

PART 2 PRODUCTS

2.1. MATERIALS

- A. General: All suspended panel ceilings shall be 24"×24" size exposed grid type, with lay-in panels. Refer to drawings for locations.
- B. Suspension system shall be exposed T & T type. Main T-runners and T-splines required for the system shall be solid continuous rolled form shapes as manufactured by National Rolling Mills, Co., or approved equal, double web construction, grid color white.
 - 1. Type 1 ceilings:
 - a. Main Runners and Main Beam Cross T - ML 6000 series, 15/16" exposed face, minimum 1-1/2" web height, with a minimum load carrying capacity of 7.5#/LF for a five (5) foot simple span.
 - b. Cross T - ML 6148, 15/16" exposed face, minimum 1-1/2" web height, with a minimum load carrying capacity of 14.9#/LF for a four (4) foot simple span.
 - c. Wall edge molding: Channel or angle shaped section, hemmed edge, fabricated from .020 thick steel.
 - d. Reveal edge molding - "W" type section, hemmed edge, fabricated from .020" thick steel.
 - 2. Type 2 (fire-rated) ceilings:
 - a. Main Runners and Main Beam Cross T - FST 6000 series, 15/16" exposed face, minimum 1-1/2" web height, with a minimum load carrying capacity of 7.5#/LF for a five (5) foot simple span.
 - b. Cross T - FST 6148, 15/16" exposed face, minimum 1-1/2" web height, with a minimum load carrying capacity of 14.9#/LF for a four (4) foot simple span.
 - c. Wall edge molding: Channel or angle shaped section, hemmed edge, fabricated from .020 thick steel.
 - d. Reveal edge molding: "W" type section, hemmed edge, fabricated from .020 thick steel.
 - e. Hold down clips shall be installed at ceiling of Type 2 as required to maintain UL classification of assembly.
- C. 24"×24" Lay-in Panels:
 - 1. All panels of each type shall be from one lot number of manufacturer.

2. All acoustical lay-in panels shall be non-combustible mineral fiber type, meeting the requirements of Fed. Specification No. SS-S-118a, class 25, as tested and reported by the Acoustical Materials Association.
 - a. Ceilings shall have panels equal to Armstrong Minaboard "Cortega Angled Regular #704", 24"×24"×5/8" size, white.

PART 3 EXECUTION

3.1. GRID INSTALLATION FOR SUSPENDED PANEL CEILINGS

- A. Install main tee runners on 48" centers supported every 48" by No. 12 ga. wire hangers.
- B. In addition to procedures described in (A) above, all ceiling grid for fire-rated ceilings shall additionally have one hanger wire at the midpoint of all 4' cross tees and at all four corners of all 2'×4' light fixtures.
- C. T-splines intersecting moldings shall be locked in place. All main T-runners and cross T-splines shall be straight in alignment and flush at intersections. The assembled grid shall be leveled to within 1/8" in 12'. Edge molding shall be installed wherever the suspended grid abuts walls, columns and other vertical surfaces.
- D. No instructions on drawings or herein stated shall delete or modify the U.L. requirements set forth for fire-rated ceilings.

3.2. LAY-IN PANEL INSTALLATION

- A. Install all panels in each room or space in same direction.
- B. Install hold down clips as required for fire rating, to prevent uplift for ceilings.
- C. Completed installation shall be clean and free of finger marks, damage, or variation in panel color, texture, and pattern.

3.3. SURFACE APPLIED INSTALLATION

- A. Adhesive: Subcontractor shall install ceiling tile by glue-up method to concrete planks using acoustical tile cement.
- B. Trim projecting tongue from exposed edged panels after installation. Provide vinyl edge trim at all exposed edges.
- C. Provide general areas of coverage as shown on the drawings. Apply tile joints to align with concrete plank jointing. Do not allow tiles to span joints in concrete planks.

3.4. LIGHTING FIXTURE ENCLOSURES

- A. Install gypsum board or ceiling panel enclosures above all lighting fixtures as required to achieve fire-rating consistent with ceiling system. Enclosure shall conform to an approved U.L. rated assembly.

3.5. CEILING GRID LAYOUT

- A. Ceiling grid layout for each room shall be to accomplish best spacing of lighting and provide equal and balanced grid spacing at all sides of room.

3.6. LIGHTING DIFFUSER INSTALLATION

- A. Install wall edge molding as specified for lay-in ceilings for all lighting diffusers.
- B. Install diffusers after completion of lighting enclosures. Align and interlock all diffuser unit joints.
- C. Light fixtures within grids shall be suspended from structure at each corner of fixture.

END OF SECTION

**SECTION 096519
RESILIENT TILE FLOORING AND BASE**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work included: Provide resilient tile flooring and base.

1.2. QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

PART 2 PRODUCTS

2.1. MATERIALS, GENERAL

- A. Provide colors and patterns as selected by the Architect from standard colors and patterns of the approved manufacturer.
- B. Adhesives:
1. Provide waterproof and stabilized type adhesive as recommended by the manufacturer of the material being installed.
 2. Asphalt emulsions and other non-waterproof adhesives will not be acceptable.
 3. Asbestos reinforced adhesives will not be acceptable.
- C. Concrete slab primer: Provide non-staining type as required and as recommended by the manufacturer of the material being installed.

2.2. RESILIENT MATERIALS

- A. Reinforced vinyl tile:
1. Dimension: Provide 12"×12"×1/8".
 2. Acceptable products:
 - a. Armstrong "Standard Excelon"
 - b. Equal products of other manufacturers.
 - c. Maximum of 6 standard colors shall be selected for field and accent. Color selected by Architect.
- B. Resilient Wall Base:
1. Vinyl Wall Base: Products complying with FS SS-W-40, Type II, standard top-set cove, 1/8" gauge, 4 inches tall.
 - a. Maximum of 3 standard colors shall be selected.
 2. Acceptable products:
 - a. Johnsonite
 - b. Equal products of other manufacturers.

- c. Maximum of 3 standard colors shall be selected for field and accent. Color selected by Architect.

2.3. OTHER MATERIALS

- A. Provide other materials not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect at no additional cost to the Owner.
- B. Comply with Texas Accessibility Standards for floor surfaces, transitions, and edge trims.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2. PREPARATION

- A. Subfloors:
 - 1. Verify that substrata is smooth, level, at required finish elevation, and without more than 1/8" in 10'-0" variation from level or slopes shown on the Drawings.
 - 2. Prior to laying materials, thoroughly clean the surfaces to be covered and inspect the subfloors.
- B. Priming:
 - 1. Apply concrete slab primer if so recommended by the resilient flooring manufacturer.
 - 2. Apply in accordance with the manufacturer's recommendations as approved by the Architect.

3.3. INSTALLATION

- A. General:
 - 1. Install materials only after finishing operations, including painting, have been completed, and after permanent heating system is operating.
 - 2. Verify that moisture content of concrete slabs, building air temperature, and relative humidity are within the limits recommended by the manufacturers of the materials used.
 - 3. Maintain reference markers, holes, and openings that are in place or plainly marked for future cutting by repeating on the finish surface as marked on the sub-floor. Use chalk or other non-permanent marking device.
- B. Installing resilient tiles:
 - 1. Place units with adhesive cement in strict compliance with the manufacturer's recommendations as approved by the Architect.
 - a. Butt units tightly to vertical surfaces, nosings, edgings, and thresholds.

- b. Scribe as necessary around obstructions and to produce neat joints.
 - c. Place tiles tightly laid, even, and in straight parallel lines.
 - d. Extend units into toe spaces, door reveals, and in closets and similar spaces.
 2. Lay units from center marks established with principal walls, discounting minor offsets, so that units at opposite edges of the room are of equal width.
 - a. Adjust as necessary to avoid use of cut widths less than 3" wide at room perimeters.
 - b. Lay units square to axis of the room or space.
 3. Match units for color and pattern by using materials from cartons in the same sequence as manufactured and packaged.
 4. Lay in pattern with adjacent tiles having grain in alternating directions unless otherwise directed by the Architect.
 5. Place resilient edge strips tightly butted to units and secured with adhesive, providing at all unprotected edges unless otherwise shown.
 6. Provide and install accent color tile as directed by the Architect at no additional cost to the owner.
 7. Replace tiles where debris below tile telegraphs through to the surface.
- C. Installing base:
 1. Install base where shown on the Drawings or scheduled, using adhesive recommended by the base manufacturer.
 2. Install base in straight level pieces in runs as long as possible to minimize joints.
 3. Butt end joints tight, but do not compress material causing buckling.
 4. Provide minimum of 16" length at corner turns.

3.4. CLEANING AND PROTECTING

- A. Remove excess adhesive and other blemishes from exposed surfaces, using neutral cleaner recommended by the manufacturer of the resilient materials.

END OF SECTION

SECTION 098433
SOUND ABSORBING WALL UNITS

PART 1 GENERAL

1.1. SUMMARY

- A. Section Includes: Acoustical Wall Panels

1.2. REFERENCES

- A. ASTM C 423 Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
- B. ASTM E 84 Test Method for Surface Burning Characteristics of Building Materials
- C. ASTM E795 Standard Practices for Mounting Test Specimens During Sound Absorption Test.

1.3. SYSTEM DESCRIPTION

- A. Performance Requirements: Provide acoustical wall panels which have been manufactured, fabricated and installed to meet the following criteria:
1. Surface Burning Characteristics (ASTM E84):
 - a. Flamespread: 25.
 - b. Smoke Developed: Fabric covered panel: 105.
 2. Noise Reduction Coefficient - NRC (ASTM C423 and ASTM E795):
 - a. 1" (25.4 mm) thick panel: 0.80

1.4. SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data, including manufacturer's SPEC-DATA™ product sheet, and installation instructions.
- C. Shop Drawings: Submit elevation drawings showing wall panel layout.
- D. Samples: Submit selection samples and 12" × 12" (305×305 mm) verification samples of each type of panel to be used on the project.
- E. Quality Assurance/Control Submittals: Submit the following:
1. Test Reports: Upon request, submit product acoustical and fire test reports.

1.5. QUALITY ASSURANCE

- A. Qualifications: Utilize an installer with demonstrated experience on projects of similar size and complexity.

- B. Mock-Ups:
 - 1. Prepare an onsite mock-up consisting of at least 60 ft² (6 m²) of wall panels.
 - 2. The quality of work on the approved mock-up will be used to establish acceptable work for subsequent panel installation.
 - 3. Subject to approval by owner, the mock-up may be incorporated into the finished work.

1.6. DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirements Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
 - 1. Remove damaged or deteriorated materials from the site.

1.7. PROJECT/SITE CONDITIONS

- A. Environmental Requirements: Do not proceed with installation of wall panels until building is closed in and the HVAC system is capable of maintaining a temperature of 60 - 85 degrees F (16 - 29 degrees C) at not more than 70% relative humidity.

1.8. MAINTENANCE

- A. Extra Materials: Provide 20% additional material for use by owner in building maintenance and repair.

PART 2 PRODUCTS

2.1. ACOUSTICAL WALL PANELS

- A. Manufacturer: ESSI Acoustical Products Company.
 - 1. Contact: 11750 Berea Road, P.O. Box 643, Cleveland, OH 44111;
Telephone: (800) 886-6678, (216) 251-7888; Fax: (216) 251-9933;
E-mail: sound@bright.net; website: www.essiacoustical.com.
- B. Products/Systems: Acoustical Wall Panels, including the following:
 - 1. Silentspace Wall Panels:
 - a. Manufacturer Designation: MODEL W-107: Faced rigid fiberglass core with chemically hardened edge for impact resistant exposure, nominal 2” thickness.

2.2. PRODUCT SUBSTITUTIONS

- A. Substitutions: When approved by Architect.

2.3. MATERIALS

- A. Impact Resistant Fiberglass Core: Manufacturer's standard rigid fiberglass core 6 - 7 pcf (96 - 112 kg/m³) density with a 1/8" (3.2 mm) thick fiberglass facer, 16 pcf (256 kg/m³) density, laminated to core.
- B. Facing Material: Manufacturer's standard facing material as follows:
 - 1. Fabric: Guilford FR 701 Style 2100, a maximum of two colors will be selected.

2.4. MANUFACTURED UNITS

- A. Acoustical Wall Panels: Provide acoustical panels complying with the following:
 - 1. Facing: Fabric-faced one side, including reveals, if any.
 - 2. Core Construction: Rigid fiberglass with chemically hardened edge.
 - 3. Edge Detail: Square
 - 4. Thickness: Nominal 2" (25.4 mm)
 - 5. Size: 48" wide × 72" high (1219 × 2438 mm); set top of panel snug against the ceiling
 - 6. Noise Reduction Coefficient (ASTM C423): NRC 0.80 for 1" (25.4 mm) thick panels.
 - 7. Surface Burning Characteristics (ASTM E84): Flamespread 25 or less, Class A.
 - 8. Installation: Permanent.

2.5. ACCESSORIES

- 1. Adhesive: Manufacturer's recommended adhesive applied to back of panels.

PART 3 EXECUTION

3.1. MANUFACTURER'S INSTRUCTIONS

- A. Comply with the instructions and recommendations of the acoustical wall panel manufacturer.

3.2. EXAMINATION

- A. Site Verification of Conditions:
 - 1. Verify that conditions are satisfactory for installation of wall panels.
 - 2. Do not begin acoustical panel installation until wet work such as concrete, plastering and terrazzo work is completely dry.
 - 3. Do not proceed with installation until unsatisfactory conditions are corrected.

3.3. INSTALLATION

- A. Allow acoustical panels sufficient time to stabilize to ambient temperature and humidity conditions in the building before proceeding with installation.
- B. Install acoustical panels fitted accurately into pattern indicated.
 - 1. Scribe panels to fit adjacent construction.
 - 2. Wrap around cut edges with Fabric

3.4. CLEANING

- A. Clean exposed surfaces of acoustical wall panels that have become soiled during handling and installation in compliance with manufacturer's recommended methods. Remove and replace wall panels that cannot be completely and successfully cleaned.
- B. At the end of each workday, remove and properly dispose of waste and discarded materials.

3.5. PROTECTION

- A. Protect finished work from damage due to subsequent construction activity on the site.

END OF SECTION

**SECTION 099123
PAINTING**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work included: Paint and finish the exterior and interior exposed surfaces listed on the Painting Schedule in Part 3 of this Section, including wall texture as specified herein, and as needed for a complete and proper installation.
1. Provide final painting of doors, frames, etc.
- B. Related work:
1. Documents affecting work of this Section include, but are not necessarily limited to, general Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 2. Priming or priming and finishing of certain surfaces may be specified to be factory-performed or installer performed under pertinent other Sections.
- C. Work not included:
1. Unless otherwise indicated, painting is not required on surfaces in concealed areas and inaccessible areas such as furred spaces, foundation spaces, utility tunnels, pipe spaces, and duct shafts.
 2. Metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze, and similar finished materials will not require painting under this Section except as may be so specified.
 3. Do not paint moving parts of operating units, mechanical or electrical parts, such as valve operators, linkages, sensing devices, and motor shafts, unless otherwise indicated.
 4. Do not paint over required labels or equipment identification, performance rating, name, or nomenclature plates.
 5. Do not paint pre-finished metals, except where shown on the Drawings.
- D. Definitions:
1. "Paint", as used herein, means coating systems materials including primers, emulsions, epoxy, enamels, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.2. QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Paint coordination:
1. Provide finish coats which are compatible with the prime coats actually used.
 2. Review other Sections of these Specifications as required, verifying the prime coats to be used and assuring compatibility of the total coating system for the various substrata.

3. Upon request, furnish information on the characteristics of the specific finish materials to assure that compatible prime coats are used.
4. Provide barrier coats over non-compatible primers, or remove the primer and re-prime as required.
5. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime coatings supplied under other Sections.

1.3. JOB CONDITIONS

- A. Do not apply solvent-thinned paints when the temperature of surfaces to be painted and the surrounding air temperatures are below 45 degrees F, unless otherwise permitted by the manufacturer's printed instructions as approved by the Architect.
- B. Weather conditions:
 1. Do not apply paint in snow, rain, fog, or mist, or when the relative humidity exceeds 85%, or to damp or wet surfaces, unless otherwise permitted by the manufacturer's printed instructions as approved by the Architect.
 2. Applications may be continued during inclement weather only within the temperature limits specified by the paint manufacturer as being suitable for use during application and drying periods.

1.4. EXTRA STOCK

- A. Upon completion of the work of this Section, deliver to the Owner an extra stock equaling 2% (with a minimum of 1 gallon and maximum of 5 gallons) of each color, type, and gloss of paint used in the work, tightly sealing each container, and clearly labeled with contents and location where used.

PART 2 PRODUCTS

2.1. PAINT MATERIALS

- A. Acceptable materials:
 1. The Painting Schedule in Part 3 of this Section is based, on products of Pittsburgh Paints.
 2. Equal products of GLIDDEN, Sherwin Williams, Kelly-Moore, Monarch Paint, or other manufacturers approved in advance by the Architect, may be substituted in accordance with provisions of the Contract.
 3. Where products are proposed other than those specified by name and number in the Painting Schedule, provide under the product data submittal required by Article 1.3 of this Section a new painting schedule compiled in the same format used for the Painting Schedule included in this Section.
 4. All paint products used on the interior of the building shall meet Class A requirements for interior finish materials (flame spread 0-25, smoke developed 0-450 in accordance with NFPA 255).
- B. Undercoats and thinners:
 1. Provide undercoat paint produced by the same manufacturer as the finish coat.

2. Use only the thinners recommended by the paint manufacturer, and use only to the recommended limits.
3. Insofar as practicable, use undercoat, finish coat, and thinner material as parts of a unified system of paint finish.

2.2. COLOR SCHEDULES

- A. The Architect will prepare a color schedule with samples for guidance in painting.
- B. The Architect may select, allocate, and vary colors on different surfaces throughout the work, subject to the following:
 1. Exterior work: A maximum of two different colors will be used, with variations for trim, doors, miscellaneous work, and metalwork.
 2. Interior work: A maximum of three different pigmented colors will be used, with variations for trim and wall surfaces and wainscots.
 3. Dark tones: A maximum of two dark tones will be used as accent colors for interior, to include painted bases of walls.

2.3. APPLICATION EQUIPMENT

- A. For application of the approved paint, use only such equipment as recommended for application of the particular paint by the manufacturer of the particular paint, and as approved by the Architect.
- B. Prior to use of application equipment, verify that the proposed equipment is actually compatible with the material to be applied, and that integrity of the finish will not be jeopardized by use of the proposed equipment.
- C. Use rollers to apply masonry block filler and block filler applied to exposed concrete plank ceilings. Filler must be applied thoroughly. Visible holes are not acceptable.

2.4. OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect at no additional cost to the Owner.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2. MATERIALS PREPARATION

A. General:

1. Mix and prepare paint materials in strict accordance with manufacturers' recommendations.
2. When materials are not in use, store in tightly covered containers.
3. Maintain containers used in storage, mixing, and application of paint in a clean conditions, free from foreign materials and residue.

B. Stirring:

1. Stir materials before application, producing a mixture of uniform density.
2. Do not stir into the material any film which may form on the surface, but remove the film and, if necessary, strain the material before using.

3.3. SURFACE PREPARATION

A. General:

1. Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's recommendations.
2. Apply masonry block filler and block filler applied to exposed concrete ceilings with rollers and verify no porous conditions remain prior to applying paint.
3. Remove removable items which are in place and are not scheduled to receive paint finish, or provide surface applied protection prior to surface preparation and painting operations.
4. Following completion of painting in each space or area, reinstall the removed items by using workmen who are skilled in the necessary trades.
5. Clean each surface to be painted prior to applying paint of surface treatment.
6. Remove oil and grease with clean cloths and cleaning solvent of low toxicity and flash point in excess of 200°F, prior to start of mechanical cleaning.
7. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall onto wet newly painted surfaces.

B. Preparation of wood surfaces:

1. Clean wood surfaces until free from dirt, oil, and other foreign substance.
2. Smooth finished wood surfaces exposed to view, using the proper sandpaper. Where so required, use varying degrees of coarseness in sandpaper to produce a uniformly smooth and unmarred wood surface.
3. Unless specifically approved by the Architect, do not proceed with painting of wood surfaces until the moisture content of the wood is 12% or less.

C. Preparation of metal surfaces:

1. Thoroughly clean surfaces until free from dirt, oil, and grease.
2. Allow to dry thoroughly before application of paint.
3. For galvanized metal, etch the surface with galvaprep type acid and allow to dry thoroughly.

3.4. PAINT APPLICATION

A. General:

1. Touch-up shop-applied prime coats which have been damaged, and touch-up bare areas prior to start of finish coats application.
2. Slightly vary the color of succeeding coats.
 - a. Do not apply additional coats until the completed coat has been inspected and approved.
 - b. Only the inspected and approved coats of paint will be considered in determining the number of coats applied.
3. Sand and dust between coats to remove defects visible to the unaided eye from a distance of five feet.
4. On removable panels and hinged panels, paint the back sides to match the exposed sides.

B. Drying:

1. Allow sufficient drying time between coats, modifying the period as recommended by the material manufacturer to suit adverse weather conditions.
2. Consider oil-base and oleo-resinous solvent-type paint as dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb, and when the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.

C. Brush applications:

1. Brush out and work the brush coats onto the surface in an even film.
2. Cloudiness, spotting, holidays, laps, brush mark runs, sags, ropiness, and other surface imperfections will not be acceptable.

D. Spray applications:

1. Except as specifically otherwise approved by the Architect, confine spray application to metal framework and similar surfaces where hand brush work would be inferior.
2. Where spray application is used, apply each coat to provide the hiding equivalent of brush coats.
3. Do not double back with spray equipment to build up film thickness of two coats in one pass.

E. For completed work, match the approved samples as to texture, color, and coverage. Remove, refinish, or repaint work not in compliance with the specified requirements.

F. Miscellaneous surfaces and procedures:

1. Exposed mechanical items:
 - a. Finish electric panels, access doors, roof top units, hoods, conduits, pipes, ducts, grilles, registers, vents, and items of similar nature to match the adjacent wall and ceiling surfaces, or as directed.
 - b. Paint visible duct surfaces behind vents, registers, and grilles flat black.
 - c. Wash metal with solvent, prime, and apply two coats of alkyd enamel.
2. Exposed pipe and duct insulation:
 - a. Apply one coat of latex paint on insulation, which has been sized or primed under other Sections; apply two coats on such surfaces when unprepared.

- b. Match color of adjacent surfaces.
- c. Remove band before painting, and replace after painting.
- 3. Hardware: Paint prime coated hardware to match adjacent surfaces.
- 4. Wet surfaces:
 - a. In toilet rooms and contiguous areas, add an approved fungicide to paints.
 - b. For oil base paints, use 1% phenylmercuric or 4% tetrachlorophenol.
 - c. For water emulsion and glue size surfaces use 4% sodium tetrachlorophenate.
- 5. Interior: Use "stipple" or "sand" finish where enamel is specified.
- 6. Exposed vents: Apply two coats of heat-resistant paint approved by the Architect.

3.5. SCHEDULE OF FINISHES

A. General - All materials shall be products and manufacturers as scheduled or approved equal. Where more than one product is listed, it is the Contractor's option as to which product to use.

B. Exterior Surfaces:

- 1. All exposed ferrous metal including door frames, and miscellaneous metals shall be given:

Spot prime as required, or if unprimed, prime with:

1 coat Alkyd Rust Inhibitive Primer:	Kelly-Moore Alkyd Metal Primer 1710/11, P&L Tech-Guard S-4551, BM Alkyd Metal Primer M06, Pittsburgh Speedhide Red Lead Primer, Monarch Primer 5515, or GLIDDEN Alkyd Metal Primer 4100.
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2 coats Alkyd Gloss Enamel:	Kelly-Moore Alkyd Gloss Enamel 1700, P&L Effecto Enamel, BM Impervo Enamel, Pittsburgh Speedhide Gloss-Oil Exterior Enamel, Monarch Alkyd Gloss 5100 or GLIDDEN Alkyd Gloss Enamel 4308.
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C. Interior Surfaces:

- 1. All gypsum board walls scheduled to be painted shall be spray applied gypsum "orange peel" or "splatter drag" texture and given:

1 coat Latex Wall Primer:	P&L Vapex Wall Primer, Moore's Latex Quick Dry Prime Seal, Pittsburgh Speedhide Quick Drying Latex Primer-Sealer, GLIDDEN 1000-1200 Dulux Latex Wall Primer, Monarch 5517 Wall Primer or Kelly-Moore 971 Acry-Prime Sealer.
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2 or more coats Latex Semi-Gloss:	P&L Accolade SG, Moore's Regal Aquaglo, Pittsburgh Satinhide Latex Low-Lustre Wall and Trim Enamel, GLIDDEN Dulux SG 140, Monarch 3400 Primer Semi-Gloss, or Kelly-Moore Acry-Plex SG 1650.
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2. All gypsum board friezes, ceilings, and furrings shall be spray applied gypsum "orange peel" or "splatter drag" texture and given:
 - 1 coat Latex Wall Primer: P&L Vapex Wall Primer, Moore's Latex Quick Dry Prime Seal, Pittsburgh Speedhide Quick Drying Latex Primer-Sealer, GLIDDEN 1000-1200 Dulux Latex Wall Primer, Monarch 5517 Wall Primer, or Kelly-Moore 971 Acry-Prime Sealer.
 - 2 or more coats Latex Flat: P&L Vapex Flat Wall Finish, Moore's Regal Wall Satin, Pittsburgh Wallhide Interior Wall Flat Latex,, GLIDDEN Ultra-Hide 1210, Monarch 6100 Primer Flat, or Kelly-Moore Super Latex Flat 550.
3. All exposed ferrous metal, including door frames, miscellaneous metals, etc., shall be given:
 - 1 coat Alkyd Rust-Inhibitive Primer: P&L Tech-Guard S-4551 (if factory primed, touch up as required), BM Ironclad Retardo Rust Inhibitive Paint, Pittsburgh Speedhide Red Inhibitive Primer, GLIDDEN Alkyd Metal Primer 4100, Monarch 5515 Primer or Kelly-Moore Alkyd Metal Primer 1710/11.
 - 2 or more coats Acrylic DTM: PPG 90-474 PittTech DTM, BM M29 DTM, Monarch 3800 Premier DTM, or GLIDDEN Acrylic DTM.
4. All existing concrete masonry units and exposed concrete shall be given:
 - 2 or more coats Latex Semi-Gloss: P&L Accolade SG, BM Aquaglo SG, Pittsburgh Satinhide Latex Low-Lustre Wall and Trim Enamel, GLIDDEN Dulux SG 1407, Monarch 3400 Premier Latex SG, or Kelly-Moore Dura-Poxy Acrylic SG 1685.

END OF SECTION

**SECTION 102800
TOILET ROOM ACCESSORIES**

PART 1 GENERAL

1.1. DESCRIPTION

- A. Work included: Provide standard and detention grade toilet room accessories where indicated on the Drawings, as specified herein, and as needed for a complete and proper installation. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2. QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

PART 2 PRODUCTS

2.1. TOILET ROOM ACCESSORIES

- A. Provide products as scheduled or equal as approved in advance.
- B. Verify compliance of each toilet accessory with the Texas Accessibility Standards prior to installation.

PART 3 EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2. INSTALLATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Install each item in its proper location, firmly anchored into position level and plumb, and in accordance with the bolts to anchor all devices. Provide all required blocking for adequate anchorage.
- C. Installation of all toilet room accessories shall comply with mounting height regulations of Texas Accessibility Standards.
- D. Provide security fasteners for all installed locations within the secure perimeter.

- E. All products required in inmate occupied areas must be detention type.
- F. Schedule of Toilet Room Accessories (all accessories listed may not apply to this contract):
1. Grab Bars/Showers: **(None this project)**
 - a. Model Numbers:
 - (1) American Specialties: 3211 M, 30"×60"×30" stall. (Exposed mounting with detention screws in secure perimeter areas).
 - (2) Bobrick: 3 Wall Custom Shower Grab, 30"×60"×30" stall. (Exposed mounting with detention screws in secure perimeter areas).
 - (3) Bradley: 8060, 30"×60"×30" stall. (Exposed mounting with detention screws in secure perimeter areas).
 - b. Description: 1½" diameter, 30" long × 60" long × 30" long, stainless steel, concealed security screw attached mounting and anchorage (for non-detention areas). No. 4 satin finish. Minimum 900 pound supporting capacity.
 - c. Provide one at each roll-in handicap shower. (Contractor's option to provide three individual grab bars in lieu of single grab bar.)
 2. Grab Bars/Toilets:
 - a. Model Numbers:
 - (1) American Specialties: 3100 series. (Exposed mounting with detention screws in secure perimeter areas).
 - (2) Bobrick: B-5507x36. (Exposed mounting with detention screws in secure perimeter areas).
 - (3) Bradley: 832 series. (Exposed mounting with detention screws in secure perimeter areas).
 - b. Description: 1-1/2 inch diameter 36 inch long at rear wall and 42 inch long at side wall, horizontal, 1-1/2 inch wall clearance. Type 304 minimum 18-gage stainless steel. Concealed security screw attached mounting and anchorage (for non-detention areas). No. 4 satin finish. Minimum 900 pound supporting capacity.
 - c. Provide at each handicap water closet.
 3. Surface-Mounted Multi-Roll Tissue Dispenser:
 - a. Model Numbers:
 - (1) American Specialties: 0030.
 - (2) Bobrick: B-2888.
 - (3) Bradley: 5402.
 - b. Description: Minimum 22 gage Type 304 stainless steel cabinet. Minimum 18 gage drawn one-piece Type 304 stainless steel unit front with pivot hinge and tumbler lockset. No. 4 satin finish. Holds 2 standard core 5 inch diameter tissue rolls. Reserve roll drops in-place by automatic release. Theft-resistant spindles. Provide one per water closet.
 4. Recessed Combination Paper Towel Dispenser and Waste Receptacle **(None this project)**
 - a. Model Numbers:
 - (1) Bobrick: B-36903.

- b. Description: No projection from wall. Minimum 22 gage Type 304 stainless steel. No. 4 satin finish. Capacity minimum 300 C-fold or 400 multi-fold paper towels. Waste receptacle with all edges with hemmed construction. Removable leak proof, 1.6 gallon waste receptacle.
 - c. Provide as shown on drawings.
 - d. Contractor shall verify all wall conditions.
5. Semi-Recessed Combination Paper Towel Dispenser and Waste Receptacle (**None this project**)
- a. Model Numbers:
 - (1) Bobrick: B-3942.
 - b. Description: 4" projection from wall. Minimum 22 gage Type 304 stainless steel. Drawn and beveled one-piece seamless flange. No. 4 satin finish. Capacity minimum 600 C-fold or 800 multi-fold paper towels. Waste receptacle with all edges with hemmed construction. Removable waste receptacle secured to cabinet with tumbler lock. Minimum 12 gallon capacity.
 - c. Provide as shown on drawings.
 - d. Contractor shall verify all wall conditions.
6. Surface Mounted Paper Towel Dispenser
- a. Model Numbers:
 - (1) Bobrick: B-262.
 - b. Description: 4" projection from wall. Minimum 22 gage Type 304 stainless steel. Stainless steel piano hinge and tumbler lock at towel dispenser door. No. 4 satin finish. Hemmed towel tray opening. Capacity minimum 400 C-fold or 525 multi-fold paper towels.
 - c. Provide as shown on drawings.
 - d. Contractor shall verify all wall conditions.
7. Solid Phenolic Folding Shower Seat: (**None this project**)
- a. Model Numbers:
 - (1) American Specialties: 8206-R or 8206-L.
 - (2) Bobrick: B-5171 or B-5181.
 - (3) Bradley: 9564 or 9563
 - (4) McKinney: 274PL-R OR 274PL-L
 - b. Description: One piece, ½" thick, solidly fused plastic laminate seat with matte-finish melamine surfaces, ivory colored face sheets, and block phenolic-resin core that are integrally bonded. Integral slots for water drainage. Secured to frame with stainless steel carriage bolts and acorn nuts. Frame shall be type 304 stainless steel with satin finish. 16-gauge 1 ¼" square tubing and 18 gauge 1" diameter seamless tubing. Mounting flanges shall be 18-8, type 304 heavy gauge stainless steel. Base plate shall be 18-8, type 304 heavy gauge stainless steel. Spring shall be 17-7, type 301, 24 gauge stainless steel. Guide bracket shall be 18-8 S, type 304, 16 gauge stainless steel with satin finish.

8. Shower Grab Bar – 18×33 inch (NOMINAL): **(None this project)**
 - a. Model Numbers:
 - (1) American Specialties: 3274 (exposed mounting with detention screws in secure perimeter areas).
 - (2) Bobrick: B5861 (exposed mounting with detention screws in secure perimeter areas).
 - (3) Bradley: 8120-0362433 (exposed mounting with detention screws in secure perimeter areas).
 - (4) McKinney: 9604 series (exposed mounting with detention screws in secure perimeter areas).
 - b. Description: 1-1/4 inch diameter (1-1/2 inch diameter when required by local code) 42 inch long, horizontal. 1-1/2 inch wall clearance. Type 304 minimum 18 gage stainless steel. Concealed screw attached mounting and anchorage. No. 4 satin finish. Minimum 900 pound supporting capacity.
9. Surface Mount Coat Hook:
 - a. Model Numbers:
 - (1) American Specialties: Series 7382S
 - (2) Bobrick: B-6827
 - (3) Bradley: 9134.
 - b. Description: Type 304 - 18 gage minimum stainless steel. Concealed mounting and anchorage. No. 4 satin finish – provide on interior door side of individual restrooms.
10. Surface Mounted Liquid Soap Dispenser:
 - a. Model Numbers:
 - (1) American Specialties: 0342.
 - (2) Bobrick: B-4112.
 - (3) Bradley: 6542.
 - b. Description: Horizontal tank type for all-purpose liquid soap. Minimum 20 gage Type 304 stainless steel. Drawn one-piece construction. No. 4 satin finish. Concealed stainless steel wall plate. Clear plastic refill indicator window. Locked hinged stainless steel lid for top filling. Minimum 40-ounce capacity – provide at each lavatory.
11. Mop and Broom Holder: **(None this project)**
 - a. Model Numbers:
 - (1) American Specialties: 8215-4.
 - (2) Bobrick: B-223.
 - (3) Bradley: 9954.
 - b. Description: 36 inches long, 3-inch projection, 4 holders. Minimum 20 gage, Type 304 stainless steel hat channel. Spring loaded rubber cam-type mop holders. No. 4 Satin finish.
 - c. Provide one at each janitor/mop sink.
12. Pipe insulation and Padding Insulation Kits:
 - a. Model Numbers:
 - (1) Tubro Inc.: Handi Lav-Guard
 - b. Description: Pipe covers at H.C. Lavatories for hot and cold water supply lines and drains, white molded resilient vinyl exterior, anti-microbial

interior insulation, provide readily accessible caps to all shut off valves, provide maintenance joint and cap at all p-traps. Provide all fasteners and hardware necessary for complete installation. This item to be provided at all non-detention type Lavatories whether or not shown on drawings and shall be installed to meet all ADA/TAS requirements.

13. MOP Sink splash plate: **(None this project)**
 - a. Product description: Provide 18-8, type 304, 22-gauge, stainless steel to 48" A.F.F, above all adjacent walls of mop sink. Secure to wall with perimeter security screws at 8" O.C., caulk joints between sink and splash. Provide at each janitor/mop sink.
14. Mirror with Stainless Steel Channel Frame:
 - a. Model Numbers:
 - (1) American Specialties: 0620.
 - (2) Bobrick: B-165 Series
 - (3) Bradley: 781.
 - (4) McKinney: 190.
 - b. Description: 18"W×36"H. Minimum 20 gage stainless steel; all joints mitered, welded, and ground smooth. Type 430 – No. 4 satin finish. Galvanized steel back with slots for mounting screws and integral screw-head lock. Back protected by shock-absorbing water-resistant padding.
 - (1) Mirror to be fabricated of plate glass.
15. Shower Rod at Staff Shower **(None this project)**
 - a. Model Number: Bradley 9531
 - (1) Exposed Mounting
 - (2) Satin Finish Stainless Steel
16. Shower Curtain at Staff Showers **(None this project)**
 - a. Model Number:
 - (1) Bradley 9533 – Antimicrobial Vinyl Shower Curtain (White)
 - (2) Provide curtain hooks.
17. Pedestal Dressing Bench (None this project)
 - a. Model Number:

Bradley: Lenox Pedestal Bench
 - b. Description: 24"W×42"L×18½"H
 - (1) Benchtop: Constructed of 1½" thick High Density Polyethylene (HDPE) with homogeneous color and a matte finish texture.
 - (2) Pedestal: 17" Black anodized aluminum pedestal with welded aluminum flanges. Anchored to floor and bench top with hardware provided.
18. Shower Soap and Shampoo Dispenser: **(None this project)**
 - a. American Specialties Shower Dispenser #0346
19. Baby Changing Station **(None this project)**
 - a. Manufacturer: Foundations Worldwide, Inc., 330.722.5033, foundations.com or Equal
 - b. Model: Standard horizontal unit 100-EH

- c. Description: 34.25" wide x 15.375" high x 4" deep (closed), set bottom @ 27" A.F.F.

END OF SECTION